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In 1992 and 93 I spent a considerable amount of time working with cathodic protection on the new pipeline that we were installing. As part of this work we had to monitor the amount of cathodic protection that was being supplied to the old 36 inch line as well as to the new 42 inch line.

The new items that we were installing were just part of the project. What really surprised me was that we connected with the old existing pipeline and in several instances went in and made repairs (to both the cathodic protection and actual pipe) to the old pipeline. Some of the repairs were really obvious to my relatively untrained eye but a few of them I could not understand. Apparently, the engineers and other pipeline personnel knew what they were doing and what to look for.

The point here is that the pipeline owners have a huge investment in any pipeline and will not take shortcuts that may eventually endanger their investments. I believe that any natural gas or oil pipeline is safe unless it is affected by some outside source.

### 3) Private Property Owners

It has been my experience that most private property owners who have a gas pipeline crossing their property come out ahead in the long run. I have been involved in putting the gas line within 8 feet of a private house. I have helped build fences and restore landscaping for private property owners in Klamath, Jackson, Washington, and Deschutes Counties.

In Klamath County we crossed several farms and ranches with the ROW. I distinctly remember one farm outside of Bonanza where we literally spent days picking up small rocks from the ROW. When we were done you could look down the ROW and see how clean it was and how the surrounding farmland had many more surface rocks than what we had cleaned up on the ROW.

The same thing happened in Deschutes County, outside of Bend, where there were many nice, new large acreage non-farm houses. We sent a rock picking machine up and down the ROW and followed up with a crew consisting of approximately 6 people, hand picking what the machine had missed. When we were done you could look at where we had cleaned and look at the soil to either side of it where natural earth continually pushed new rocks to the surface.

In both of the above examples, after we left, the site was definitely in better condition than it was before we went in.

I have also seen a few instances where private property owners probably did not come out ahead after a pipeline went through their property. In almost all these cases, they were resistant from the start and would not work with the property man (a pipeline term). They would not work with the contractor and their demands were so extensive or ridiculous that they ended up with the minimum amount of restoration that was required.

### 4) Environmental Issues

I have been involved in installing miles of soil erosion silt fence in both wet and dry areas. Some of the places that we installed silt fence seemed ridiculous at the time, but I have later been able to figure out why we did it when heavy rains came. The same thing applies when it comes to placing rip rap, trees and rocks in fish habitats. These items may look silty at first but eventually they fulfill the intended purpose.

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I have been involved in several minor fuel spills. One time, near Sunriver, Oregon, a stringing track hit a rock and put a small hole in its fuel tank. The truck continued to travel for several thousand feet putting droplets of diesel fuel into the many mud puddles on the Forest Service road. My crew was working at the compressor station just over the hill so we got the initial call to respond to this spill.

We had a standard size fuel spill kit in our truck and we proceeded to put down diapers and used the dissipating chemical that was included. The chemical worked very well in breaking up the diesel sheen and we used the diapers to soak everything up. However an inspector came up and asked we were using when we showed it to him he pulled out a spec book and said that this was not an allowable treatment.

Eventually more people showed up, with the proper chemical, and we had 12 to 15 people treating the mud puddles and putting down diapers to rectify the problem. The point here is that we did our best, the inspector was there to supervise us, and eventually the situation was taken care of.

On every pipeline that I have worked on the importance of not harming wildlife has been stressed. This is true of even of pests such as rattlesnakes. If we encountered a rattlesnake in a trench or somewhere else where it interfered with our work, we had to get an environmental inspector to move it. We could not kill or harm it.

In regards to sanitary facilities, we were allowed to urinate on the right away (much like you would do anywhere in the woods). However, any defecation had to be performed in approved tow behind trailers. I have made countless numbers of trips taking crew members, sometimes several miles, to use the facilities.

#### 5) Cultural Issues

I have installed thousands of feet of temporary (usually orange) construction fencing to protect culturally sensitive areas. This fencing is also erected to delineate the ROW and to mark and protect culturally sensitive areas outside of the ROW.

One time, at the Williamson River in Klamath County, we were doing an open cut crossing. The right-of-way was approximately 75 feet wider than normal on both sides so that there would be room to place the spoils from the cut and still have room to work. All of the spoils were placed within the extended right away but some brown, slurry like, water flowed outside of the construction fencing.

Because this particular crossing was at a point where a 36 inch gas line (constructed in the 1960s) crossed the river, there was an open space on the riverbank. Over the years people had used this open space as a camping area because it provided easy access to the river. As a result, there was a huge pile of trash and garbage that had accumulated.

The foreman instructed us to hand dig a trench just inside of the construction fence so that the water/slurry mix would flow into a containment area. While completing this task we were talking with the archaeological inspector and we said "why are we trying to protect this pile of trash?". He responded that "all archaeological sites are piles of trash of some sort". This was truly a learning moment for me.

One of the most fascinating cultural related events that I participated in on a pipeline job was when we were installing a 12 inch line between the Co-gen Plant in Klamath Falls and Ashland. After the



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pipeline left the Co-gen site, it followed an old Weyerhaeuser log truck road (about 10 miles) past the town of Keno.

I was working with the bending engineer and we were responsible for shooting in and calculating over bands, sags, left, and right turns for the pipeline. Some, but not all, of this work was done before the ditch was ever dug.

One morning we were instructed to go out to the Weyerhaeuser road, to a suspected Native American burial site that was due to be slowly excavated with a rubber tired backhoe instead of a tracked, relatively high production, excavator. We were told that there might be possible burial sites and/or other archaeological findings since this area was fairly close to the banks of the Klamath River. We were told that we should be respectful and dignified in anything that we we saw and did.

We were also told to avert our eyes if anything culturally sensitive appeared. This particular instruction alone made me, more than ever, want to see everything that was within view.

The excavation proceeded very carefully and slowly, as it always does when you are potholing or trying to locate a utility or other specific buried item. About a half hour into the task, the rubber tired backhoe made a gentle pass and brought up a bone about 15 to 18 inches long.

Almost immediately, it was like the scene out of an old Western movie, except instead of pulling out six shooters, people pulled out their cell phones. The crew foreman, the inspector, the environmental inspector, the tribal monitor, the archaeologist, and the owner's representative all made phone calls. All productive work stopped instantly.

In the next few days, we (bending engineer crew) made several trips to the site as the higher-ups tried to decide what to do. I will not discuss some of the things that we saw because they are culturally sensitive. However, I did not see any inappropriate behaviors or actions in regard to this site. What I saw was an extensive effort to correct, mitigate, and resolve the situation in a respectful, dignified manner satisfactory to everyone.

Initially, the owner and contractor attempted to bore underneath the site. This did not work because after encountering 8 feet of topsoil (along the Klamath River) the bedrock was too hard to bore through. I was told that this effort alone cost \$50,000. I actually watched the boring machine trying to slam through the hard rock. In the end, the pipeline along the road was bent to do a sort of semi-circle around the site with a concrete wall in between. I know this because our crew shot in the potential bends on the first day. I do not know what the final cost was.

All of the above anecdotal examples are given to show what happens routinely or semi-routinely on a large pipeline project. I could give dozens and dozens of more examples of how pipeline employees address problems, mitigate circumstances, and try to do the right thing. This is just part of a pipeline project. When changing and unforeseen situations are encountered, they are dealt with in a appropriate manner.

In summary, it is my opinion, as a resident of Klamath County and the state of Oregon, that the DEIS more than adequately addresses environmental concerns about the Jordan Cove and Pacific Connector projects. Any potential identified or unidentified problems will be dealt with by the regulating authorities, owners, or contractors.

IND136-1

IND136-1 Comment noted.

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IND137

The Butterfly Effect is a metaphor, which loosely translated means, *the existence of seemingly insignificant moments can alter history and shape destinies*. Initially unrecognized, these moments create connections of cause and effect that in retrospect have clearly changed the course of a human life or triggered a momentous event to occur.

Oregon is having a butterfly moment in terms of the Pacific Connector Gas Pipeline and Jordan Cove LNG Energy Projects; any decision by the Federal Government or the State of Oregon to allow the export of fracked natural gas will harm our country's natural resources, and damage Oregon's fragile indigenous environment. Granting permission to export natural gas to foreign and competing interests may be perceived as seemingly insignificant. However, it has the very real potential to detrimentally affect the economic future of the United States in unimaginable ways. It will affect climate change and contribute to the warming of our planet.

The 36" diameter, super high-pressure pipeline (1400PSI) will cut a 100-foot swath of land 232 miles long across Southern Oregon, affecting 400 water bodies multiple times. It will cross through 150 miles of forest and 23 miles of pristine shrubs and grasslands. Almost 43 miles of the pipeline will traverse through late successional reserve - old growth trees causing the harvest of 1,712 acres of ancient forestlands. More than two million acres of watersheds will be impacted. The Draft Environmental Impact Statement (DEIS) released in November 2014, dismisses this travesty by stating, *"this project will result in some limited environmental impacts."*

Project owner, Canada's Veresen, Inc., states their "purpose and need," for constructing the pipeline and LNG plant and terminal is to INCREASE FRACKING.<sup>1</sup> If they cannot export natural gas, then they will need to cut back on fracking. FERC has determined that fracking is not "environmental in nature," and have refused to consider the impacts of fracking in the draft environmental study.<sup>2</sup>

Unfortunately, the environment, property rights and ethical principles don't seem to matter when you mix together money, politics and a desire for profit. Moreover, it almost always equals weakened regulations. Regulations coming in the form of congressional fast tracking, local permit time-extensions, inadequate conditions, inferior safety requirements and other visible bias' in favor of a corporate checkbook.

Federal law trumps state and local jurisdiction except in Oregon's Coastal Zone Management Area (CZMA). A section of the proposed pipeline runs through the CZMA in Douglas County. Douglas County officials along with the State of Oregon have the opportunity to turn off the spigot to stop natural gas exports and affect the hideous practice of fracking. Oregon has the control and authority to say the health of humanity and the planet take precedence over greed. It is not always about money, power and shareholder profits.

<sup>1</sup> Application May 2013 Resource Report 1 Page 1-1 – 1-4, Navigant Report, titled Jordan Cove LNG Export Project Market Analysis Study Dated January 2012

<sup>2</sup> DEIS November 2014 Page 1-20, 1-21

Stacey McLaughlin

## IND137 Stacey McLaughlin, Myrtle Creek, OR

IND137-1 The effects of the Project on forests and other vegetation are discussed in section 4.5.1.2. The watersheds crossed by the project include more than 2 million acres but the Project would impact a very small percent of any watershed, see table 4.14.3-1. The percent of a watershed impacted is on only one of several measures that are considered in the analysis.

IND137-2 See the response to IND1-3.

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Oregon is faced with a butterfly moment. We have the power to choose well, alter history, and shape the destiny of our natural resources for generations to come in the Pacific Northwest, perhaps the whole United States, indeed the entire world.

Stacey McLaughlin

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Stacey McLaughlin  
799 Glory Lane  
Myrtle Creek, Oregon 97457

Mr. Tyler J. Krug  
U.S. Army Corps of Engineers  
North Bend Field Office  
2201 N. Broadway, Suite C  
North Bend, Oregon 97457-2372  
Via Email: NWP-2012-441@usace.army.mil

RE: "NWP-2012-441 – Public Comment"

Dear Mr. Krug:

I am the Chief Petitioner in a matter currently being litigated before the Court of Appeals of the State of Oregon, along with three other private landowners, opposing the Pacific Connector Gas Pipeline construction project essential to the Jordan Cove LNG Energy Project. The proposed project is located within the State Coastal Zone Management Area (CZMA) of Douglas County, Oregon and is in violation of local Land Use Development Laws. We are objecting to the construction in the Coastal Zone Management Area, the public need and necessity, what constitutes a public utility according to local land use laws, and other applicable zoning regulations and laws. **Any consideration or approval of this project prior to the resolution of legal actions is premature and subject to invalidation.**

The proposed LNG liquefaction plant, export terminal and natural gas transmission line will cause disastrous and irreparable harm in Oregon and other parts of the country as it pertains to the Clean Water Act and the Harbors and Rivers Act.

In order for project owner Veresen, Inc., a Canadian mega-corporation to meet its export goals to Asia, it will require an increase in hydraulic fracturing or "fracking," in other parts of the country and Canada. The chemicals used in fracking, and the fracking process itself, poisons the land, drinking water and contributes significantly to climate change through the increasing release of methane gas into the atmosphere. These are associated factors of this project and must be taken into consideration.

The Williams and Veresen proposed Pacific Connector Gas Pipeline project will create numerous violations of the Rivers and Harbors Act, specifically as it pertains to the Endangered Species Act. The projects will affect both public and private lands, crossing more than 300 private properties where 90% of the private landowners have said NO to the Pipeline. The 36" diameter, super high-pressure pipeline (1400PSI) will slash a 100-foot wide swath of land 232 miles long across Southern Oregon, **affecting 400 water bodies multiple times.** It will cross through 150 miles of forest and 23 miles of pristine

Stacey McLaughlin/NWP-2012-441

January 11, 2015

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IND137-3 See the response to IND1-3.

IND137-4 The effects of the Project on forests and other vegetation communities are discussed in section 4.5. The watersheds crossed by the Project include more than 2 million acres but a very small percent of any watershed would be impacted. See table 4.14.3-1. The percent of a watershed impacted is only one of several measures that are considered in the analysis.

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shrubs and grasslands. Almost 43 miles of the pipeline will traverse through late successional reserve - old growth trees causing the harvest of 1,712 acres of ancient forestlands 1,237 acres of younger trees and the permanent removal of 545 acres of forests. **More than two million acres of watersheds will be impacted.**

**The Jordan Cove project will result in almost 38 acres of wetlands being permanently affected, with the removal of more than 182 acres of upland vegetation, including 69 acres of forest and 113 acres of shrubs and grasslands. Approximately 178 species of amphibian, reptiles, birds and mammals occupy upland habitats on the North Spit near the proposed Jordan Cove terminal. Overall, 47 amphibians and reptiles, 278 birds and 106 mammal species are known to occur in upland habitats crossed by the Pacific Connector Gas Pipeline.**

Nine mammals including seven whale species, five birds, and five amphibians and reptiles, one invertebrate and six fish that are listed as threatened or endangered species under the Endangered Species Act are exposed and jeopardized by the project; including the marbled murrelet and northern spotted owl, vernal pool fairy shrimp, and five fish species including the green sturgeon and coho salmon.

The Draft Environmental Impact Statement (DEIS) released in November 2014, dismisses all of this by stating, "this project will result in some limited adverse environmental impacts. However, most of these impacts would be reduced to less-than-significant levels with the implementation of the applicants proposed mitigation measures."

Of particular interest to the Army Corps of Engineers needs to be Subpart J of the Essential Fish Habitat (EFH) Regulations. The EFH defines *adverse effect* as any impact that reduces quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical or biological alterations of waters or substrate and loss of, or injury to benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce the quality and/or quantity of EFH. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site specific or habitat-wide impacts, including individual cumulative or synergistic consequences of actions.

Subpart J further defines, healthy ecosystem as an ecosystem where ecological productive capacity is maintained, diversity of the flora and fauna is preserved and the ecosystem retains the ability to regulate itself.

Subpart J also addresses "non-fishing related activities that may adversely affect EFH. Activities include but are not limited to: dredging, filling, excavation, mining, impoundment, discharge, water diversions, thermal additions, actions that contribute to non-point source pollution and sedimentation, introduction of potentially hazardous materials, introduction of exotic species, and the conversion of aquatic habitat that may eliminate, diminish, or disrupt the functions of the EFH. For each activity, there must be listed a description of the known and potential adverse effects to EFH.

Subpart J states, "There must also be a cumulative impact analysis. Cumulative impacts are impacts on the environment that result from the incremental impact of an action

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IND137-5 The Project's Biological Assessment (BA) contains an EFH assessment, which was developed in compliance with the federal regulations and will be reviewed by the FWS, NOAA, and COE.

IND137-6 The cumulative effects assessment can be found in section 4.14 of the DEIS.

IND137-5

IND137-6  
cont.

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*when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time and should analyze how the cumulative impacts influence the function of EFH on an ecosystem or watershed scale. An assessment of the cumulative and synergistic effects of multiple threats, including the effects of natural stresses (such as storm damage or climate-based environmental shifts) and an assessment of the ecological risks resulting from the impact of those threats on EFH, also is to be included. The information submitted by the applicant does not address cumulative impacts.*

IND137-6  
cont.

Noticeably the mitigation measures proposed by the applicant are inadequate given that many are not even known. Neither FERC nor the Army Corps of Engineers or the applicant has provided the Biological Assessment, (BA) which includes in part the EFH. FERC only initiated consultations with the National Oceanic and Atmospheric Administration National Marine Fisheries Service concurrently with the issuance of the Draft EIS; therefore, those comments and concerns are also not known. **The Army Corps of Engineers is premature in its request for comment when essential information required for comment is not available.** The application submitted to the Army Corps of Engineers repeatedly refers to the Draft Environmental Impact Statement Resource Reports.<sup>1</sup>

IND137-7

FERC's suggestion that *"this project will result in some limited adverse environmental impacts. However, most of these impacts would be reduced to less-than-significant levels with the implementation of the applicants proposed mitigation measures."* is thoughtless and careless and categorically incorrect since all of the environmental impacts to this project are not yet even known because studies (Example Biological Assessment) are not completed. These facts demand that the Army Corps of Engineers determine that this application is incomplete and deny the permit request, especially as it pertains to the EFH.

IND137-8

Oregon's natural resources are not *less-than-significant*. This project has the potential to harm our local population and devastate the global portrait of climate change. The release of methane gas from fracking to secure the natural gas commodity for this project and its intended export *will* affect climate change. This project *will* contribute to the warming of our planet which over the long term has the negative impact on our oceans, rivers and mammals and fishes to the point of extinction. Denying the permit application is the only plausible mitigation measure. No permitting agency is adequately connecting the dots when it comes to these long-term adverse impacts as is required by the Army Corps of Engineers when applying the requirements of Subpart J of the EFH. Global warming is a result of fossil fuel use and contemporary extraction methods; there is no scientific doubt of its consequences on mammals, fishes and oceans and rivers and streams. This must be accounted for and addressed when evaluating this permit application.

IND137-9

The Army Corps of Engineers is charged with maintaining *healthy ecosystems* as it pertains to the Essential Fish Habitat Regulations, along with a fiduciary and moral

<sup>1</sup> USACE Permit Application Introduction and Section 1.4 Endangered Species Act (ESA Compliance)

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- IND137-7 The BA and EFH are being developed and will be released to the FWS, NOAA, and COE for review. There is no statute in the ESA that required the BA to be released in conjunction with a DEIS. The NOAA declined the FERC's offer to be a cooperating agency; however, they will be reviewing the DEIS, and may provide the cooperating agencies with comments on the DEIS.
- IND137-8 The Project is in the DEIS stage. The DEIS does not state that the analysis is complete or that any conclusions are final. Nor has the COE made any finding about the permit.
- IND137-9 This documents an appeal of a 2009 Douglas County land use decision filed in March 2014. It is not a comment on the DEIS.

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obligation to deny the application. I respectfully request the U.S. Army Corps of Engineers honor its obligations under the law, recognizing that inadequate data is available for consideration of this permit application for either the Jordan Cove LNG Energy Project or the Pacific Connector Gas Pipeline as it pertains to NWP-2012-441; further, I respectfully request the U.S. Army Corps of Engineers to deny this application as incomplete and inconsistent with the provisions of the Clean Water Act and the Rivers and Harbors Act and most importantly the Essential Fish Habitat Regulations.

Sincerely,

*Stacey McLaughlin*

Stacey McLaughlin  
799 Glory Lane  
Myrtle Creek, OR 97457  
[stacey@mountaintopinsight.com](mailto:stacey@mountaintopinsight.com)

Stacey McLaughlin/NWP-2012-441

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August 1, 2014

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington, DC 20426

Re : Copy of Appeal of Douglas County, Oregon Major Amendment to Conditional Use  
Permit for Williams Pacific Connector Gas Pipeline

Dear Ms. Bose:

Please accept the following document as comment regarding opposition to the Pacific  
Connector Gas Pipeline project in Douglas County, Oregon

Sincerely,

/s/ Stacey McLaughlin

Stacey McLaughlin  
Affected Private Property Owner  
799 Glory Lane  
Myrtle Creek, OR 97457

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**NOTICE OF REVIEW**

**Appeal of a decision regarding land use matters pursuant to Section 2.500 of the  
Douglas County Land Use and Development Ordinance**  
Date: March 31, 2014

Submitted by: John Clarke, 1102 Twin Oaks Lane, Winston, OR 97496  
Richard Chasm, 730 Hoover Hill Road, Winston, OR 97496  
Stacey McLaughlin, 799 Glory Lane, Myrtle Creek, OR 97457

**A. Decision Sought to be Reviewed:** Pacific Connector Gas Pipeline, LP, Approval of a request for a MAJOR AMENDMENT to a previously approved Conditional Use Permit & Utility Facility Necessary for Public Service (PD File No. 09-045); Planning Department File No. 13-047.

**B. Party Status:** Petitioners were individually qualified as a party by the Douglas County Planning Commission at a public hearing held on October 17, 2014, pursuant to section 2.200 of the Douglas County Land Use and Development Ordinance (LUDO).

**C. Specific Grounds relied upon in the petition request for review pursuant to Planning Commission Action of March 20, 2014:**

**III. Findings on Procedural Issues**

**A. The 2009 Approval Has Been Extended**

*"The fact that Pacific Connector seeks to remove Condition of Approval #12 (limiting the authorization to "the import of natural gas only") is not relevant to whether the 2009 Approval remains valid. Permits may be extended if it is determined that a change of conditions, for which the applicant was not responsible, would prevent the applicant from commencing this operation within the original time limitation." LUDO 3.39.0300. That is what happened here. Nothing in the LUDO prohibits the holder of a valid permit for when an extension has been approved from also seeking either a minor amendment or a major amendment to the permit, as authorized in LUDO 2.900.*

*Finally, this proceeding on Pacific Connector's request for a Major Amendment to PD 09-045 does not afford opponents an opportunity to challenge extensions granted on PD -09-045. In order to approve the Major Amendment, the Commission has considered whether PD 09-045 has been duly extended, and the Commission finds that it has.*

Petitioners are challenging and requesting review of the aforementioned findings on procedural issues adopted by the Planning Commission on March 20, 2014, as follows:

1. *"The fact that Pacific Connector seeks to remove Condition of Approval #12 (limiting the authorization to "the import of natural gas only") is not relevant to whether the 2009 Approval remains valid."*

IND137-10

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IND137-10 The attached letter of appeal is applicable to the Douglas County Land Use Development Ordinances, and the decisions made by Douglas County. FERC does not have authority or jurisdiction over this County's local decisions. Therefore, this comment letter does not directly apply to the FERC process or this EIS.

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Petitioners deem the CUP expired on December 10, 2011. The validity of the CUP permit is a fundamental issue. It is unreasonable for the Planning Commission to assert that an expired CUP can be modified. Furthermore, a CUP cannot be extended in violation of the Douglas County Land Use and Development Ordinance. Petitioners deem an illicit approval quashes any extension(s) granted.

2. Finally, this proceeding on Pacific Connector's request for a Major Amendment to PD 09-045 does not afford opponents an opportunity to challenge extensions granted on PD 09-045. In order to approve the Major Amendment, the Commission has considered whether PD 09-045 has been duly extended, and the Commission finds that it has.

The granting of extensions and approvals are germane to the request for a Major Amendment; therefore, making the following relevant and applicable for consideration by the Planning Commission. The Planning Commission failed to address or consider evidence submitted which substantiates Petitioner's claim that the CUP expired on December 10, 2011.

a.) On December 10, 2009 – the Douglas County Planning Commission approved the application of Pacific Connector for a Conditional Use Permit & Utility Necessary for Public Service, Planning Department File No. 09-045 (the "2009 Approval"). The 2009 Approval authorized the construction of a natural gas pipeline crossing 7.31 miles within the Coastal Zone Management Area (CZMA) of Douglas County, crossing properties zoned Timberland Resource (TR), Farm Forest (FF) and Exclusive Farm Use – Grazing (FG).

Section 3.39.200 of the Douglas County Oregon Land Use and Development Ordinance (LUDO) states: A conditional use permit will become invalid without special action if:

1. The permit is not exercised within two (2) years of the date of approval.
2. The use approved by the conditional use permit is discontinued for any reason for one (1) continuous year or more.

b.) On December 17, 2009 – the Federal Energy Commission issued a certificate of public convenience and necessity to Pacific Connector Gas Pipeline, LP (Pacific Connector) under section 7 of the NGA to construct and operate a 234-mile-long, 36-inch diameter interstate natural gas pipeline extending from the outlet of the Jordan Cove LNG terminal to a point near Malin, in Klamath County, Oregon on the Oregon/California border, as well as blanket construction and transportation certificates under subpart F of Part 157 and subpart G of Part 284 of the Commission's regulations.

Within seven days of the granting of the Douglas County CUP (PD File No. 09 – 045,) Pacific Connector Gas Pipeline received the necessary permit/certificate to begin construction of a natural gas pipeline crossing the 7.31 miles within the Coastal Zone Management Area of Douglas County and issued a press release to this effect. (See attached Exhibits)

Pacific Connector Gas Pipeline LP delayed and chose not to begin construction in a timely manner and instead facilitated a series of extension requests wrongly granted by the Douglas County Planning Director under Section 3.39.300 Granting of Extensions of the Douglas County Land Use and Development Ordinance.

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Section 3.39.300 states: *An applicant may request an extension of the validity of a conditional use permit approval. Such request shall be considered a Ministerial Action and shall be submitted to the Director, prior to the expiration of such approval, in writing, stating the reason why an extension should be granted.*

*The Director may grant an extension of up to one (1) year in the validity of the conditional use permit approval if it is determined that a change of conditions, for which the applicant was not responsible, would prevent the applicant from commencing his operation within the original time limitation.*

In response to other petitioner requests and demands, the applicant has repeatedly argued that the Douglas County CUP pertains only to the 7.31 stretch of pipeline contained within the CZMA of Douglas County; therefore, the Pacific Connector Gas Pipeline LP could have commenced work on the 7.31 mile stretch of pipeline pursuant to the original time limitations in Douglas County CUP (PD File No. 09—045); and, if they could not, the applicant failed to demonstrate why in their request for an extension as required by the Douglas County LUDO.

- With expiration of the December 10, 2011 expiration of the CUP time limitation pursuant to Section 3.39.200 of Douglas County's LUDO imminent and no work having commenced by September 2011 - the applicant sought an extension of (PD File No. 09—045,) at the solicitation of the Douglas County Planning Department.
  - The Pacific Connector Gas Pipeline request for an extension offers no evidence that a change of conditions exists or existed that prevented them from commencing operations for the 7.31 stretch of pipeline that is relevant to the CUP time limitations.
- On October 13, 2011, Jonathan M. Wright, Administrative Planner for Douglas County granted an extension of PD File No. 09-045 in violation of Douglas County LUDO Section 3.39.300 - *The Director may grant an extension of up to one (1) year in the validity of the conditional use permit approval if it is determined that a change of conditions, for which the applicant was not responsible, would prevent the applicant from commencing his operation within the original time limitation.*
  - The October 13, 2011, correspondence from Jonathan M. Wright offers an extension of the Conditional Use Permit and Utility Facility without a determination that a change of conditions existed for which the applicant was not responsible and that would prevent the applicant from commencing his operation within the original time limitation.
  - On December 7, 2011, the Jordan Cove— Pacific Connector Project Update announces it has received approval from the U.S. Department of Energy to export domestic natural gas to U.S. free trade partners. The application to export was filed on September 22, 2011 – a week later on September 30, 2011, the extension request for the CUP that is limited to *import* only is submitted to Douglas County. The Press Release goes on to state, "Originally planned as a liquefied natural gas (LNG) import terminal connected to the

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Pacific Connector Gas Pipeline, Jordan Cove made the decision to consider the additional capability to also export LNG...."

A second extension to December 10, 2013 was similarly granted by Jeffrey A. Lehrbach, Administrative Planner on October 23, 2012; a third extension was similarly granted on November 7, 2013 by Stuart Cowie, Administrative Planner. Both extension requests again containing no evidence that a change of conditions for which the applicant was not responsible, would prevent them from commencing operations within the original time limitation or the previous erroneously granted extensions.

The Douglas County Land Use and Development Ordinance clearly states that a determination must be made by the Director as defined in the LUDO, that there has been a change in conditions to prevent the commencement of work authorized by a Conditional Use Permit in order for an extension to be granted.

At no time has the applicant produced substantive evidence or proof that they could not have commenced work pursuant to the time limitations of the CUP. Furthermore, the Douglas County Planning Director has failed to exercise due diligence and require the applicant to produce evidence or substantiate that a change in condition existed for which the applicant was not responsible, and that prevented the applicant from commencing his operations within the original time limitation.

While it may be the Planning Department's practice to sanction rubber-stamp extensions, it is not the spirit or the intention of the law as outlined and presented in the Douglas County Land Use and Development Ordinance Section 3.39.300.

Pacific Connector Gas Pipeline extension requests present as routine form letters certifying that they have not now, or ever intended to meet the time limitations of the original CUP approval or the subsequent extensions. Pacific Connector Gas Pipeline, LP, through the issuance of correspondence, press releases and newsletters has unashamedly announced construction schedules beyond the time limitations of the original CUP and subsequent illicit time extensions.

In addition, Pacific Connector Gas Pipeline has willfully violated the integrity of the Douglas County Land Use and Development Ordinance and the decision of the Douglas County Planning Commission in the granting of the original CUP on December 10, 2009, which was for import purposes only and in accordance with their original application request. Pacific Connector Gas Pipeline instead has consciously delayed any construction because of dependence on the Jordan Cove Energy project which has, "made the decision to consider the additional capability to also export LNG because changes in the domestic gas supply outlook within the past three years (stated first quarter 2012) have resulted in an abundant supply of natural gas, rendering the U.S. market less attractive for imports. The proposed Pacific Connector Gas Pipeline project could benefit . . . by providing additional supply options that would make it possible to transport natural gas from the Opal Hub in Wyoming . . . to Coos Bay and the LNG terminal." (Exhibit attached)

While Petitioners continue to assert that the Conditional Use Permit expired on December 10, 2011, the following evidence demonstrates that the extensions granted on October 13,

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2011, October 23, 2012 and November 7, 2013, were in fact granted in violation of 3.39.300 of the Douglas County LUDO, as the applicant was indeed responsible for and caused their own delays.

On April 16, 2012, the Federal Energy Regulatory Commission (FERC) Docket No. CPO7-441-001, et. al. (25.), vacated the December 17, 2009, Order authorizing the Jordan Cove LNG import terminal. The vacation was ordered because Jordan Cove had decided that construction and operation of an import facility was not viable under current market conditions and had made the determination to use the Jordan Cove terminal facilities for only the exportation of natural gas. Since the Pacific Connector Gas Pipeline was proposed as an integral part of the larger Jordan Cove Project, the stated purpose of the pipeline being to transport gas sourced from the Jordan Cove terminal, FERC also vacated authorization to construct those facilities.

"Jordan Cove is owned by Veresen and the Pacific Connector Gas Pipeline is equally owned by Veresen and a subsidiary of the Williams Companies, Inc." See attached Exhibit from Veresen, Inc., outlining ownership.

As early as July 27, 2011, Jordan Cove applied to the Department of Energy for authorization to export natural gas and intended to ask FERC to amend its existing authorization to add export facilities. Pacific Connector as a part of that existing application and authorization knew even before it requested an extension of a CUP for import only in September 2011 that its plans were to export.

In addition when FERC issued its order in April 2012, withdrawing approval, Pacific Connector Gas Pipeline, continued to facilitate extensions on the import only CUP approved by Douglas County with full awareness that they would be required to file a new application with FERC, which did not occur until more than a year later in June 2013.

Conditions of approval from Douglas County in 2009 included FERC approval and an "import" only restriction. When FERC withdrew its approval in April 2012, one could reasonably assume that it is irrational and negligent for an extension to be granted at the local level in October 2012 on a CUP that was overtly in violation of the original conditions of approval.

On June 6, 2013, Pacific Connector Gas Pipeline (owned by Veresen, Inc., who also owns the proposed Jordan Cove LNG facility) filed a new application with FERC requesting the necessary certificate of public convenience and necessity to construct and operate a pipeline whose purpose is for the export of natural gas.

In light of all of this evidence and supporting data, petitioners are requesting that the Board of Commissioner's find that the Conditional Use Permit & Utility Facility Necessary for Public Service (PD File No. 09-045); Pacific Connector Gas Pipeline LP was effectively expired on December 10, 2011, Planning Department File No. 13-047. The applicant has repeatedly failed to meet the requirements of the County's Land Use and Development Ordinance Section 3.39.300; and the Planning Director wrongly authorized extensions in violation of the requirements of the Douglas County Land Use and Development Ordinance Section 3.39.300.

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**B. Pacific Connector's Application is not premature**

*Several opponents testified that they believe this application should be stayed until federal regulatory processes reach particular thresholds - for example, issuance of a Draft Environmental Impact Statement (DEIS) or Final Environmental Impact Statement (FEIS), or approval of a Certificate of Public Convenience and Necessity by FERC. Under Oregon law, however, the County land use process is independent of federal permitting activities. Indeed the County is required to process a permit application in accordance with statutory timelines, generally requiring a final decision within 150 days of when the application is deemed complete. (ORS 215.427) Opponents have cited no authority or approval standard, and the Commission is aware of none, which requires or allows this county application process to be put on hold pending actions in related but separate federal processes. The Planning Commission concludes that there is no legal impediment in Oregon law or the LUDO to seeking county and federal approvals concurrently.*

Petitioners are requesting review of the aforementioned findings on procedural issues adopted by the Planning Commission on March 20, 2014.

Petitioners believe the application for a Major Amendment is incomplete. The Douglas County Planning Department has failed to acknowledge or understand petitioner's testimony and intent regarding, at a minimum, its demand for a draft environmental impact statement or Petitioner's preference that a final environmental impact statement be included in the application. As it currently stands, the application for the Weaver Ridge 1.7 mile section, as well the entire 7.31 miles of the Pipeline in the CZMA lacks adequate data to fully address the environmental impacts of pipeline construction as it pertains to the CZMA.

Petitioners deem the application incomplete pursuant to the Oregon Coastal Management Program (OCMP), which applies within the CZMA. Without an FEIS on the project, the Planning Commission is unable to assess the general level of risk as defined by the OCMP for a high-pressured pipeline containing natural gas. Without the FEIS information the Planning Commission cannot knowingly apply the proper conditions for construction or characterize the level of risk in the coastal zone from natural hazards such as tsunamis, or earthquakes, not to mention those caused by man.

Petitioners deem that without adequate seismic, and other environmental and geologic data the Planning Commission cannot qualify the application as complete. The Planning Commission approved the original CUP application and this request for a Major Amendment without critical information necessary to make an informed, responsible and safe decision.

A decision made without sufficient technological (example: pipeline construction), environmental (example: seismic, geologic, etc.) data compromises the safety of people residing, visiting and owning property in rural Douglas County. When the Planning Commission approved the request for Major Amendment, Douglas County landowners and residents were put at risk of serious injury or death.

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Moreover, a decision based on an incomplete application on such an environmental, hazardous and sensitive issue, particularly in the protected Coastal Zone Management Area demonstrates irresponsible local government at the highest level. To facilitate exposing Douglas County and its citizens to injury, death, fiduciary and legal risk to such an extent will adversely affect taxpayers on both a short and long-term basis, particularly in light of the fact the courts can easily rule it could have been prevented. (Exhibit attached)

Petitioners are fearful that without adequate environmental geologic and seismic data the financial future of Douglas County will be forfeited and seized by the types of potential liability that is currently facing the State of Washington and a rural community in Kentucky as timely examples.

Douglas County is well within its purview of authority to require the completion of the Final Environmental Impact Statement before rendering a decision. Petitioners find it unreasonable and negligent for the County to forfeit its right to this information in advance of a final decision. (See February 14, 2014 account of natural gas explosion in rural Kentucky; March 31, 2014 Williams Pacific Northwest LNG Facility Explosion)

B. Commissioner [Ware] is Not Disqualified From Participating in the Decision on this Application

*The Commission concludes that all Planning Commission members who participated in the decision were capable of rendering a fair judgment.*

Petitioner's call attention to the following chain of events:

January 9, 2014

- Commissioner Brosi, who prior to reviewing the record casts an affirmative vote at the January 9, 2014, meeting in favor of the applicant request for a Major Amendment. Planning Department Staff advise that Mr. Brosi cannot vote because he has not reviewed the record. Mr. Brosi's vote is disallowed.
  - Petitioners believe, even unknowingly, Mr. Brosi did in fact publicly demonstrate bias in favor of the applicant by casting an affirmative vote prior to reviewing the record.
- Once Commissioner Brosi's vote was disallowed the vote became a tie vote and the matter is deemed denied.
  - Pursuant to LUDO Section 2.300 (3) (j) "If a majority of the quorum fail to agree, and there is no lower decision, the matter shall be deemed denied, unless members preset at the hearing vote to reschedule the deliberation."
- Planning Director Keith Cubic then instructed the Commission that it must affirm that it could not reach a majority vote, in order for the matter to be appealed to the Board of Commissioners. The matter was affirmed with the motion passing unanimously with Commissioner Brosi abstaining.
  - Planning Director Keith Cubic does not instruct or inform the Planning Commission that it must or can reschedule a deliberation.

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- Petitioners believe the LUDO is unmistakable in intent and spirit that an action to reschedule a deliberation must take place at the same meeting. No mention or instruction to this effect was provided to the Planning Commission.

- A Petitioner overhears members of the applicant contingent discussing the meeting outcome and strategizing with the applicant attorney on how to solicit Commissioner Brosi's vote to be counted as they exited the Courthouse following the January 9, 2014 meeting.
  - Petitioner is willing to testify to this account under oath.

January 10, 2014

- A notice of Public Meeting advising that on Wednesday January 22, 2014 at 3:30 p.m. in Room 103 of the Justice Building the Planning Commission will hold a public meeting solely for the purpose of adopting findings to memorialize their action resulting from a lack of a majority decision in the Pacific Connector matter.

January 15, 2014

- A telephone conference is scheduled with the applicant and Planning Director Keith Cubic.

January 16, 2014

- The public meeting scheduled for January 22, 2014, to adopt findings in the Pacific Connector matter was cancelled.

January 21, 2014

- A telephone conference is scheduled with the applicant attorney, Planning Director Keith Cubic, Planning Staff member Cheryl Goodhue and Senior Planner Stuart Cowie. Although requested by Petitioner McLaughlin, no meeting notes were produced.

January 22, 2014

- The day of the cancelled Special Planning Commission meeting a telephone conference between Planning Staff and the applicant attorney takes place.

January 23, 2014

- The day after the telephone conference takes place, the cancelled Special Planning Commission meeting is rescheduled to February 5, 2014.

January 24, 2014

- A notice is received from the Planning Department informing parties that the January 22, 2014 public meeting of the Planning Commission was cancelled due to lack of a quorum and was rescheduled to Wednesday, February 5, 2014.
- The purpose of the meeting has changed and the notice now states that the Planning Commission will either adopt findings memorializing their split-vote decision (which had already been affirmed on January 9, 2014 at the behest of the Planning Director) or reschedule deliberation pursuant to 2.300.i. of the LUDO.

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February 5, 2014

- The Special Meeting Agenda for February 5, 2014 states, "THE PLANNING COMMISSION WILL TAKE ACTION TO EITHER:  
1) ADOPT FINDINGS MEMORIALIZING THEIR SPLIT DECISION OF JANUARY 9, 2014, OR:  
2) RESCHEDULE DELIBERATION PURSUANT TO 2.300.4 OF THE LAND USE AND DEVELOPMENT ORDINANCE."
- Attached to the agenda is the Planning Director's report of February 5, 2014, containing information noticeably drafted to induce the Planning Commission to reschedule deliberations and not memorialize their prior vote.
- As a final comment in the report it is mentioned that the Planning Department has prepared draft findings to memorialize the Planning Commission's prior action of a tie vote and application denial on the LNG for consideration this evening if no reschedule for further deliberation is authorized.
  - At no time are the draft findings memorializing the prior Planning Commission vote of a tie vote produced or provided to the Planning Commission for review. The draft findings are not included in the Planning Director report to the Planning Commission.
- There is no discussion other than an immediate inquiry by Commissioner Ware asking why Commissioner Brosi had not been allowed to participate in the vote. He also asked if Commissioner Brosi could have participated in the vote if he had taken the time to review the Record prior to the vote.
- Planning Director Cubic then states that if the Commission decided to reschedule the deliberation, it would allow Commissioner Brosi time to review the record and then he would be able to participate in the deliberation.
- Mr. Cubic further stated that at the next meeting, Commissioner Brosi could then reveal that he had reviewed the Record, that he had no conflict of interest and the Commission could then proceed to a vote with all Commissioners participating.
- There is no discussion.
- A motion is then made by Commissioner Ware and seconded by Commissioner Seonbuchner to reschedule deliberations on the Pacific Connector Gas Pipeline, LP request for a Major Amendment. The motion carries.

February 7, 2014

- A notice is sent advising that the Planning Commission has made a decision to reschedule deliberations on the Pacific Connector Gas Pipeline pursuant to LUDO Section 2.300.3.J based on the previous January 9, 2014 public meeting in which the Planning Commission vote was split three to three; with mention that no further opportunity will be allowed for public testimony. The meeting is scheduled for February 20, 2014.
- No information is provided announcing that Commissioner Brosi will now be participating in the deliberations.

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February 12, 2014

- Correspondence from Petitioner McLaughlin is directed to the Planning Commission expressing concern regarding the reconsideration and redeliberation decision and new information submitted into the record by Planning Commissioner Keith Cubic regarding instructions and bias presented by the Planning Director.
  - No response is received and the correspondence is kept out of the record under the pretense "it is new testimony."

February 20, 2014

- The Planning Commission does not redeliberate their decision from the January 9, 2014 meeting, rather new deliberation proceedings are conducted and Commissioner Brosi is included in the process. The proceedings confirm that the pipeline will not provide natural gas to Douglas County. It was then determined that public need is not a part of the decision making criteria.
- Planning Commission members hold considerable discussion, which denotes a lack of understanding of the process, requirements and authority of the Planning Commission.
- Chair Goitigolzarri clarifies the import or export of gas has no impact on the criteria for approval. Commissioner Ware moves, seconded by Commissioner Seonbuchner to approve the Major Amendment with the conditions as outlined by Staff. A myriad of other motions and seconds and clarifications ensue before a vote is held and the motion is approved with Commissioner's Goitigolzarri, Murphy, Seonbuchner and Ware approving the motion and Commissioners Duckett and Hawks opposing the motion. The motion carries five to two to approve the Major Amendment to the Conditional Use Permit.
- Planning staff indicate that the Applicant will prepare the Findings of Fact for the Planning Commission to review and approve at the March 20, 2014 Planning Commission meeting.

March 20, 2014

- The Findings of Fact prepared by the Applicant Attorney granting the Major Amendment and thus removing the highly controversial Condition No. 12 limiting the pipeline for import of LNG only are approved by the Douglas County Planning Commission.

Petitioners call attention to Section 2.300 (3)(b.) of the Douglas County LUDO, which states, "No member shall serve on any proceeding in which such member has bias. Meeting minutes and transcripts clearly demonstrate bias by Commissioner Ware and suggested bias by Commissioner Brosi.

Petitioners believe it is of paramount importance that the integrity of the Planning Department, Planning Commission and the Board of Commissioners be observed and held to the highest ethical standards to protect and preserve public trust.

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Petitioners find the chain of events, the subsequent and overt change in prescribed actions to the Planning Commission and the consequent change in decision from the meeting of January 9, 2014, extremely disturbing and questionable. Moreover, Petitioners believe distinct bias in favor of the applicant is suggested by events and actions occurring subsequent to the January 9, 2014 Planning Commission meeting.

#### IV. Findings Under Applicable Approval Criteria

- A. Article 3 – Exclusive Farm Use – Grazing Zone
- B. Article 2 – Timberland Resource Zone
- C. Article 5 – Farm Forest Zone

Pacific Connector Gas Pipeline LP request for a Major Amendment to a previously approved Conditional Use Permit & Utility Facility Necessary for Public Service. Planning Department File No. 13-047.

Planning Director Keith Cubic made the following statement to the Planning Commission meeting at its meeting of February 20, 2014:

*"For a pipeline in exclusive farm use zone there are additional standards that would apply if this project was not under review by the Federal Energy Regulatory Commission. And those are the standards that are often associated with, 'is there a utility facility or a pipeline necessary for public service?' But in the case of review of a pipeline that is subject to a Federal Energy Regulatory Commission the review standards that are set out to judge necessary for public service are eliminated from the formula. But the statute, the rule, and the local code say things like reasonable alternatives, vocational dependency, existing rights of way, costs are not and cannot be considered in the review criteria for a pipeline that is subject to both the Federal Energy Regulatory Commission Review."*

Petitioners are challenging the accuracy of the Planning Director's statement and the applicant's assertion that, "public interest," for natural gas pipelines is decided exclusively by federal agencies as it pertains to "whether the PCGP is a utility facility necessary for public service" in the applicable zones. Petitioners offer the following information:

*The U.S. Congress passed the federal Coastal Zone Management Act [CZMA] in the early 1970's to address competing uses and resource impacts occurring in the nation's coastal areas. The Act included several incentives to encourage coastal states to develop coastal management programs. One incentive was a legal authority called "federal consistency" that was granted to coastal states with federally approved coastal management programs. The federal consistency provisions of the CZMA require that any federal action occurring in or outside of Oregon's coastal zone, which affects coastal land or water, uses or natural resources must be consistent with the Oregon Coastal Management Program. The federal consistency requirement is a rather unique concept in that state programs for coastal management cannot generally be preempted by federal law (FERC).*

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The Oregon Coastal Management Plan reviews Federal Licenses & Permits, in particular the Federal Energy Regulatory Commission, and specifically:

- Power plant siting and transmission lines/construction and operation of hydroelectric plants
- Interstate pipelines
- Permits for construction and operation of facilities needed to import or export natural gas

The Major Amendment to the CUP pertains to lands in the Coastal Zone Management Area and is therefore subject to the provisions of the Coastal Zone Management Program (CZMP). The CZMP stipulates to the Comprehensive Plans and land use regulations adopted by local governments to provide the enforceable policies for the type of energy project proposed by Pacific Connector Gas Pipeline, LP, in the Coastal Zone Management Area. The CZMP states, "LNG projects that were formerly subject to the exclusive jurisdiction in the EFSC review process are now subject to the local planning and state agency review process. This is due to the pre-emption effects of the Energy Policy Act of 2005. The CZMA is Douglas County's opportunity to maintain its equal footing with the Federal Government in its decision-making capacity and should not be misspent or ignored as irrelevant.

Petitioners are therefore, challenging instructions and information provided to the Planning Commission in outlining the scope of their authority in determining and applying approval criteria.

Specifically, as it pertains to the applicable zones Douglas County LUDO Section 1.090 defines UTILITY FACILITY as: A communication facility or a facility constructed for a public utility, including but not limited to: facilities for generating power on less than 10 acres; new distribution lines (gas-oil-geothermal) with a right-of-way of 50 feet or less width, or new distribution lines for electric transmission with a right-of-way of 100 feet or less width; water intakes, treatment, pumping and distribution; wastewater treatment; rural fire protection facility; utility lines, accessory facilities or structures not limited to an individual end user and not in a public right-of-way which are necessary for public service (electricity, gas, water, telephone, cable); and, equipment for the production, transmission, delivery or conveyance of communications, with or without lines, including towers. These uses may be subject to limitations as specified in the applicable zoning designation. Utility facilities are locationally dependent if they must cross or be located on land to achieve reasonably direct routes or service or to meet unique geographic needs. Temporary workforce housing facilities may be provided in accordance with OAR 660-033-0130.

Douglas County LUDO Section 1.090 defines PUBLIC UTILITY as: Any corporation, company, individual, association of individuals, or its lessees, trustees or receivers, that owns, operates, manages or controls all or any part of any plant or equipment for the conveyance of telegraph, telephone messages with or without wires, for the transportation as common carriers, or for the production, transmission, delivery or furnishing of heat, light, water or power, directly or indirectly to the public.

Petitioners deem that Utility Facility for the purposes of the Pacific Connector Gas Pipeline project does not meet zoning requirements as outlined in the LUDO.

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In addition, with the removal of Condition No. 12 the CUP no longer meets the requirements of Public Utility as defined and included in the definition of Utility Facility. Public Utility is specific in its definition and intent – “for the transportation as common carriers or for the production, transmission, delivery or furnishing of heat, light, water or power, directly or indirectly to the public.

Petitioners challenge that in the absence of a specific definition of “Public,” in the Douglas County LUDO it is reasonable to conclude that it does not intend to include persons outside of Douglas County, the State of Oregon, or the United States.

Moreover, Petitioners call attention to the sanctity of “public” and “public use,” in Douglas County land use decision-making as specified in Section 2.32.040 of the Douglas County Code and Oregon Revised Statute 35.015

**Section 2.32.040 Prohibit Taking Property for Private Use.** A recent decision of the United State Supreme Court, *Kelo v. City of New London, Connecticut* (04-108), may allow the use of eminent domain powers for the benefit of purely private entities despite the limitations on that power contained in the federal constitution. The Douglas County Board of Commissioners is opposed to such encroachments on the traditional rights of owners of real property. The Douglas County Board of Commissioners believes that the power of eminent domain should be used to acquire property only for public purposes, as traditionally has been the case in Oregon. **(Ord 2005- 10-01, Eff 2-1-06)**

**35.015 Prohibition on condemnation of certain properties with intent to convey property to private party; exceptions.** (1) Except as otherwise provided in this section, a public body as defined in ORS 174.109 may not condemn private real property used as a residence, business establishment, farm or forest operation if at the time of the condemnation the public body intends to convey fee title to all or a portion of the real property, or a lesser interest than fee title, to another private party.

Petitioners assert that the approval of any land use decision by a Douglas County, Oregon authority, which can result in the taking or transfer of private lands using eminent domain by any public body is in direct violation of both State and local laws.

#### V. Decision

*Based upon the [preceding] Findings of Fact and the evidence contained in the entire record, the Commission finds that the proposed Major Amendment PD 09-045 is consistent with the applicable approval criteria, and hereby approves the application for the requested Major Amendment, ie., the removal of the 2009 condition limiting the pipeline to “import only” and the approval of the alternative alignment in the Weaver Ridge area subject to...*

In light of the removal and absence of Condition No. 12 (import only) and a definition of “public utility and utility facility,” as outlined in the Douglas County LUDO Petitioners deem it is reasonable to conclude that applicable approval criteria is not met.

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Petitioners challenge whether the Planning Commission has thoroughly applied the provisions of the Douglas County Comprehensive Plan in its considerations of applicable criteria and whether its decision is consistent with Statewide Planning Goals.

Petitioners believe the Planning Commission has, with some exceptions, attempted to make a qualified and informed decision based on the information it has received from the Douglas County Planning Department.

However, Petitioners are concerned that sufficient expertise and technical understanding exists within the Douglas County Planning Department to ensure that all legal, legislative, technical, scientific and pertinent matters have been satisfied in addressing this highly sensitive application and request for a Major Amendment. Petitioners further question whether the Planning Department has relied too heavily on the applicant and the applicant attorney to guide and propel this Conditional Use Permit forward to secure their desired decision.

**Conclusion:**

Petitioners request the Douglas County Board of Commissioners consider this Notice of Review and render a decision consistent with the evidence and facts presented in this Notice and determine that Pacific Connector Gas Pipeline, LP, Conditional Use Permit & Utility Facility Necessary for Public Service (PD File No. 09-045); Planning Department File No. 13-047 is invalid.

Moreover, Petitioners appeal to the Board of Commissioners to fully examine competencies in the Planning Department given evidence of oversights to the LUDO, and the distinct disorder, and confusion demonstrated in the Planning Commission's proceedings as it pertains to this issue, evident in transcripts of the meetings.

Petitioners recognize it is probable the Board of Commissioners will remand this issue back to the Planning Department and offer the applicant the opportunity to reapply for a new Conditional Use Permit without prejudice, allowing for an authentic and more judicious process. Petitioners would like the Board of Commissioners to understand its desire is simply to have a fair process that respects and follows the law.

Sincerely,

John Clarke  
Party

Richard Chasni  
Party

Stacey McLaughlin  
Party

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**Exhibits and Supporting Documentation  
Attached and Included in the Notice of Review  
Appeal of a decision regarding land use matters pursuant to Section 2.500 of the  
Douglas County Land Use and Development Ordinance  
Date: March 31, 2014**

Pacific Connector Gas Pipeline Extension Requests 2011/2012/2013  
U.S. Department of Energy Notice of Application to export LNG September 22, 2011 (Free trade)  
U.S. Department of Energy Notice of Application to export LNG May 23, 2012 (Non-Free Trade)  
Jordan Cove – Pacific Connector, Project Update/Press Release announcing December 7 (17), 2011 received approval from the U.S. Department of Energy to “export” natural gas to U.S. free trade partners  
139 FERC 61,040, United States of America – Order, Vacating Certificate and Authorizations Pertaining to 2009 approval  
Jordan Cove Energy Project Press Release – (ownership, Veresen/Williams/Pacific Connector et. al.) s/Vern Wadey  
Veresen Press Release, May 22, 2013 – announcing filing of application to construct and operate an (LNG) export facility (Jordan Cove), “application follows more than a year of engineering and design activities (demonstrating prior knowledge to all requested extensions by Pacific Connector, Jordan Cove Project Partner)  
Pacific Connector Gas Pipeline Correspondence dated June 6, 2013 to Federal Energy Regulatory Commission requesting certificate of public convenience and necessity authorizing export of LNG  
News article regarding Washington State Mudslides (alivoces.com) 2014  
Minutes of Planning Commission Meetings On-File: October 17, 2013 Written/Transcript; December 12, 2013/Transcript; January 9, 2014 Written/Transcript on file; February 5, 2014 Written/Transcript on file; February 20, 2014; Written/Transcript on file  
Meeting Notices of Douglas County Planning Commission: on file  
Planning Department Email/Correspondence: on file

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IND138

This document is presented to protest the proposed pipeline route for the Pacific Connector natural gas export facility.

The proposed route goes through a portion of my property which greatly alarms me.

The project will require a swath of my timber to be cut. This timber is the watershed for the well and spring that is necessary for the water supply for two homes, barn and numerous outbuildings needed in the operation of my ranch. These entities are also vital for fire protection of these buildings.

I cannot understand the lack of logic that has chosen the proposed route for this pipeline with all the major problems it will create for me and other landowners in the area when the alternative route over Blue Ridge is so much more feasible.

Jean Stalcup

IND138-1

## IND138 Jean Stalcup

IND138-1 Vegetation clearing and construction within the watershed of a water supply well would not necessarily impact the well. However, in its Groundwater Supply Monitoring and Mitigation Plan, Pacific Connector states that should it be determined after construction that there has been an effect to groundwater supply (either yield or quality), Pacific Connector would provide a temporary supply of water, and if determined necessary, would replace the affected supply with a permanent water supply. Mitigation measures would be coordinated with the individual landowner to meet the landowner's specific needs. In addition, during easement negotiations the landowner can work with Pacific Connector on siting the line within individual properties to increase the distance between the pipeline and any springs or wells.

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IND139

Anne Stine, Ashland, OR.

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

IND139-1

Natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

IND139-2

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

IND139-3

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

IND139-4

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

IND139-5

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

IND139-6

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

IND139-7

## IND139 Ann Stine, Ashland, OR

- IND139-1 This appears to be based on a form letter. See responses to IND1.
- IND139-2 This appears to be based on a form letter. See responses to IND1.
- IND139-3 This appears to be based on a form letter. See responses to IND1.
- IND139-4 This appears to be based on a form letter. See responses to IND1.
- IND139-5 This appears to be based on a form letter. See responses to IND1.
- IND139-6 This appears to be based on a form letter. See responses to IND1.
- IND139-7 This appears to be based on a form letter. See responses to IND1.

20150202-5003 FERC PDF (Unofficial) 1/30/2015 8:09:01 PM

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND139-8

**IND139 Continued, page 2 of 2**

IND139-8 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150202-5007 FERC PDF (Unofficial) 1/31/2015 12:20:55 AM

IND140

kaseja wilder, Eugene, OR.

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

IND140-1

Natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

IND140-2

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

IND140-3

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

IND140-4

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

IND140-5

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

IND140-6

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

IND140-7

## IND140 Kaseja Wilder, Eugene, OR

- IND140-1 This appears to be based on a form letter. See responses to IND1.
- IND140-2 This appears to be based on a form letter. See responses to IND1.
- IND140-3 This appears to be based on a form letter. See responses to IND1.
- IND140-4 This appears to be based on a form letter. See responses to IND1.
- IND140-5 This appears to be based on a form letter. See responses to IND1.
- IND140-6 This appears to be based on a form letter. See responses to IND1.
- IND140-7 This appears to be based on a form letter. See responses to IND1.

20150202-5007 FERC PDF (Unofficial) 1/31/2015 12:20:55 AM

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND140-8

**IND140 Continued, page 2 of 2**

IND140-8 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.



20150202-5015 FERC PDF (Unofficial) 1/31/2015 1:37:28 PM

IND141

**IND141 Linda Fuller, Bayfield, WI**

Linda Fuller, Bayfield, WI.  
FERC should not be giving the right to a foreign company to condemn Oregonians land. The LNG is not even needed for the consumption needs of the US citizens, as far as I have been able to determine from facts gathered.

IND141-1

The project will clearout a 100ft wide swath through wildlife habitat along 76 miles of public forests in Southern Oregon, 80% of which has been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to the endangered wild life that depend on these forests and streams, like the coho salmon, the spotted owl, and the marbled murrelet.

IND141-2

Ther period of time for public input has been far too short, for such action that would have such drastic results.

IND141-3

I have lived in this area, in Oregon, and it is hard to imagine that our federal govt would take such action that would destroy this land and its creatures, all for providing LPN for export to foreign countries. No . This is not correct to do, or reasonable.

Thanks you for further considering this input, before making your decision. God speed action on this that is not greed motivated.  
Linda Fuller, Bayfield, Wisconsin.

IND141-1 Comment noted.

IND141-2 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.

IND141-3 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150202-5029 FERC PDF (Unofficial) 2/1/2015 2:24:05 PM

IND142

Marguerite, Azalea, OR.

I am opposed to the Jordan Cove Liquefaction and Pacific Connector Pipeline Projects (CP13-483-000 and CP12-492-000) LNG pipeline for the following environmental reasons.

1) It destroys the connectivity that the Forest Service and public and environmental groups worked so hard to create, the system of LSRs that connect up so species can move through our forests. Now, the swath that will be logged through southern Oregon acts like a fence isolating the movement of species. Why with so many people working to establish connectivity do we now abandon the idea?

IND142-1

2) The cumulative effect, the big view: you sitting in an office reading this will be looking at maps with only human towns marked on them. The rest of the land will look blank to you. It requires a necessary and important, maybe even an almost superhuman, effort of imagination for you to picture the number of streams, forests and ecologies that the pipeline will be crossing. Consider: even crossing one river should require an environmental impact statement for that one place. Yet this pipeline and its swath of logging are crossing hundreds of rivers and streams. Other writers will no doubt discuss specific issues; I wish to emphasize the sheer size, the cumulative effect of slicing through the forests of southern Oregon. The area you go through is a jewel, the jewel of our country. How well do you know the terrain? Please don't think that this is just a "hot air" statement. What is our purpose unless we value things that are rare and precious? (Certainly not for the purpose of pumping American resources to send away to other countries.)

IND142-2

3) Earthquake issues: please remember and take seriously the knowledge that a constructed sea wall is NOT an effective barrier against a tsunami.

IND142-3

4) Security and accident problems: Such a long distance cannot be protected against terrorist activity.

IND142-4

## IND142 Marguerite, Azalea, OR

IND142-1 The BLM and Forest Service have not abandoned the LSR network. Compensatory mitigation plans have been designed by the BLM and Forest Service to ensure the objectives of the LSR network, including connectivity, could continue to be met if the PCGP project were approved and constructed (see section 2.1.4 and appendices H and F of the DEIS).

IND142-2 The DEIS discloses the number of waterbodies that would be crossed or impacts (see sections 4.4 and 4.6), as well as how much forested habitats would be impacted (see section 4.5). The cumulative effects of this project are addressed in section 4.14 of the DEIS.

IND142-3 In section 4.2.1.3 of the EIS, the Tsunami Hazard subsection describes the tsunami barrier. This design would be also review by DOGAM. It would be designed to withstand a peak crest tsunami elevation of 60 feet. An analysis of the Project's design in relation to potential accidents, including earthquakes and tsunamis, is included in section 4.13 of the EIS.

IND142-4 The safety and reliability of the Project is addressed in section 4.13. The potential for a terrorist attack along this Project is an unknowable factor.

20150202-5031 FERC PDF (Unofficial) 2/1/2015 3:32:00 PM

IND143

Jill Whelchel, Glide, OR.

I vehemently oppose the dangerous Jordan Cove LNG pipeline, which would cut a destructive swath across Southern Oregon. It would destroy some of the forest, and all of the sanctity, at OWL Farm-147 acres held by Oregon Women's Land Trust for nearly 40 years. OWL Trust was the first women's land trust in the country; it is a 501c3 nonprofit committed to the ecological preservation of land, and it provides access to land and sound land practices for women.

The pipeline would clearcut thousands of acres in Southern Oregon and tunnel under scores of streams and rivers. It would allow exemptions to the rules protecting owls, salmon, and other endangered wildlife, to enable the Veresen Company to haul away over 7,000 log-truck loads of our forests to clear the pipeline right-of-way.

Veresen is asking for the power of eminent domain to condemn and take the property they want to use for their pipeline and for the profits they anticipate from exporting natural gas to Asia. Use of eminent domain requires service to the public good, and a for-profit pipeline built for resource export would violate that requirement. The terminal itself, with its highly flammable LNG storage tanks would be built in an earthquake/tsunami zone. I am concerned about dangers to the coastal ecosystem, given the risks of catastrophic events; dredging and pollution of the fragile estuary for terminal development would create permanent damage to sea life and the coast environment.

OWL Farm is intended to be preserved in perpetuity with respect for its natural ecosystem. It would be heartbreaking for a swath of forest at the farm to be clearcut, permanently dedicated to invasive maintenance by a pipeline company, and placed at risk from pipeline rupture. OWL Farm's wildlife habitat for the Known Spotted Owl Activity Center (KOAC) would be destroyed.

The farm's landowners were offered an inadequate one-time payment of \$2,290 for giving up 7.8 acres of land, and that offer came with threats of eminent domain and condemnation if refused. The truth is, no amount of money would adequately compensate for the loss of wildlife habitat and giant trees, the destruction of watershed integrity on landslide-prone slopes, and the privacy and sanctity of this forest preserve. In addition, this land would become vulnerable to the dangers of the leaks, explosions, and fires that plague pipelines across the country.

If this devastating project is allowed to proceed, sanctuary for women and wildlife will be destroyed by a foreign corporation whose bottom line is profits from the fossil fuel industry. Please don't let this happen. For those of us who live here and for the sake of our beautiful state, the cost is far too high.

IND143-1

**IND143 Jill Whelchel, Glide, OR**

IND143-1 See the response to IND1-5 for eminent domain. Seismic risks are discussed in section 4.2.1.3. The risks of catastrophic events are discussed in section 4.13. Also see the response to IND1-4.

20150202-5086 FERC PDF (Unofficial) 1/30/2015 6:31:56 PM

IND144

This filing is in protest of the route chosen by Pacific Connector for the pipeline for the Jordan Cove natural gas exporting project.

Since the chosen route goes through my property it is of deep concern to me.

One (and only one) of my worries concerns the drainage system in my pastures. These fields are reclaimed tidelands and the ground is very unstable. Logs keep coming to the surface that have been buried for eons. This seems like a potentially dangerous area for a volatile substance to be conveyed.

Then there is the problem of drainage. That side of my property has several springs which are drained out of the pasture via ditches. These ditches must be maintained by cleaning equipment regularly. If this equipment is prohibited from crossing the pipeline my fields will rapidly become flooded and useless at a great loss to me financially. Also in a short time this water buildup will affect Stock Slough road and neighboring property.

All of this chaos could be avoided by Pacific Connector routing the pipeline over the Blue Ridge alternative route which has been proven to be viable.

Jean Stalcup

IND144-1

IND144-2

IND144-3

## IND144 Jean Stalcup

IND144-1 Comment noted.

IND144-2 The applicant is required to repair all ditches damaged during construction. Normal farm equipment can drive over the pipeline.

IND144-3 Comment noted.

20150202-5139 FERC PDF (Unofficial) 2/2/2015 11:49:26 AM

IND145

**IND145**     **Kyle Latta, Coos Bay, OR**

IND145-1     Comment noted.

Kyle Latta, Coos Bay, OR.

I have read the draft EIS that FERC has put together on the Jordan Cove Energy Project, I agree with FERC's findings. FERC has looked at every aspect of this project and analyzed each potential issue that may come about during construction as well as after construction is completed. This is a large project and yes it is going to be very evident that something big is going to be coming into our community but as FERC has laid it out there are a lot of steps explained in this document that are going to minimize the damage during construction as well as steps to ensure that everything is put back to as close as natural prior to beginning of project. I would like to ask you to move forward with the permitting process so we can be one step closer to one of the largest things that Coos County has had the opportunity to be a part of in many years.

IND145-1

20150202-5141 FERC PDF (Unofficial) 2/2/2015 11:52:43 AM

IND146

**IND146 Tim Huntley, Coos Bay, OR**

IND146-1 Comment noted.

IND146-2 The Blue Ridge alternatives are discussed in section 3.4.2.2.

Tim Huntley, Coos Bay, OR.

I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. So, I believe that Jordan Cove has submitted and complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND146-1

IND146-2

20150202-5143 FERC PDF (Unofficial) 2/2/2015 11:53:45 AM

IND147

**IND147 Kyle Latta, Coos Bay, OR**

IND147-1 Comment noted.

Kyle Latta, Coos Bay, OR.

I have read the draft EIS that FERC has put together on the Jordan Cove Energy Project, I agree with FERC's findings. FERC has looked at every aspect of this project and analyzed each potential issue that may come about during construction as well as after construction is completed. This is a large project and yes it is going to be very evident that something big is going to be coming into our community but as FERC has laid it out there are a lot of steps explained in this document that are going to minimize the damage during construction as well as steps to ensure that everything is put back to as close as natural prior to beginning of project. I would like to ask you to move forward with the permitting process so we can be one step closer to one of the largest things that Coos County has had the opportunity to be a part of in many years.

IND147-1

20150202-5142 FERC PDF (Unofficial) 2/2/2015 11:52:44 AM

IND148

**IND148 Tim Huntley, Coos Bay, OR**

IND148-1 Comment noted.

IND148-2 The Blue Ridge alternatives are discussed in section 3.4.2.2.

Tim Huntley, Coos Bay, OR.

I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. So, I believe that Jordan Cove has submitted and complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND148-1

IND148-2



20150202-5144 FERC PDF (Unofficial) 2/2/2015 11:55:00 AM

IND149

**IND149 Tim Huntley, Coos Bay, OR**

Tim Huntley, Coos Bay, OR.  
I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. So, I believe that Jordan Cove has submitted and complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND149-1

IND149-2

IND149-1 Comment noted.

IND149-2 The Blue Ridge alternatives are discussed in section 3.4.2.2.

20150202-5207 FERC PDF (Unofficial) 2/2/2015 2:14:22 PM

IND150

Jake Sweet, Coos Bay, OR.  
I have reviewed the Draft Environmental Impact Statement and concur with FERC's findings. As with any project, the community and environment will be affected to a certain degree. The mitigation measures Jordan Cove Energy (JCE) has proposed and/or agreed to incorporate into both the short and long term construction/operation of these facilities drastically reduces these adversities. In reviewing this document it is evident that both FERC and JCE have gone above and beyond in ensuring this project will be a success to all parties involved. I ask that FERC proceed with the permitting process to grant JCE their permit for this project. I also urge you to review the alternate Blue Ridge Route for the pipeline. Although both are viable options, it appears that the Blue Ridge Route would be a more suitable region, as it affects less private parcels, and above all greater public safety both during construction and operation.

IND150-1

IND150-2

**IND150      Jake Sweet, Coos Bay, OR**

- IND150-1      Comment noted.
- IND150-2      The Blue Ridge alternatives are discussed in section 3.4.2.2.

20150211-5200 FERC PDF (Unofficial) 2/11/2015 2:13:34 PM

IND151

David McAlaster, Ashland, OR.  
Dear Sir or Madam,

May I please comment on the proposed LNG terminal at Jordan Cove? The following comments are from information provided on the Cascadia Wildlands website at <https://www.cascwild.org/lng-comments/>.

FERC needs to consider the long-term effects on climate of the Jordan Cove project (the "Project"). The Project will continue to operate for decades, increasing the chance for climate change.

IND151-1

The Project will depend on drilling, transporting, and processing methane into LNG, all of which leak methane. FERC needs to consider the effects of these leaks, especially since methane is 86 times worse than burning coal for its effect on global warming.

IND151-2

The Project's stated purpose is to continue and expand fracking ("Resource Report One"). Fracking has cumulative negative effects on the environment. FERC needs to consider these effects.

IND151-3

The Project would be built in an earthquake subduction zone and tsunami area in Coos Bay. FERC should consider the fact that power failures could cause the huge tanks of LNG to warm up and start expanding, which could be a hazard.

IND151-4

The Project does not seem to be a "public benefit", instead allowing a Canadian company to make money from exporting LNG. Land will have to be condemned by eminent domain for the pipeline for this project, and FERC should not allow it.

IND151-5

The Project is said to save money by using thinner pipes, fewer welds, and other measures. This could be hazardous in Oregon's mountains. FERC should consider this.

IND151-6

The Project involves cutting a wide swath for many miles in public forests in Oregon. Much of these forests contain reserved wildlife habitat. The Project also involves permanently removing stream-side vegetation along 400 waterways. FERC should consider that the pipeline may negatively impact both the wildlife habitat and the waterways.

IND151-7

FERC should extend the comment period. This will give the public a chance to read the long DEIS and to comment on the Project.

IND151-8

Thank you for the chance to comment on the Project. It is greatly appreciated!

## IND151 David McAlaster, Ashland, OR

IND151-1 Climate change was addressed in section 4.14.3.12 of the DEIS. Greenhouse gas emissions resulting from the Project were discussed in section 4.12.1.4 of the DEIS. See response to IND1-1.

IND151-2 The scope of the Project does not include drilling for natural gas; the proposed action is the transportation of natural gas in a pipeline from Malin to the Jordan Cove terminal in Coos County, where the natural gas would be liquefied into LNG. Furthermore, exploration and production of natural gas (i.e., drilling and processing natural gas) are not activities regulated by the FERC.

Information has been added to the FEIS that addresses methane leakage and the relative impact of natural gas compared to coal.

IND151-3 Fracking, or hydraulic fracturing, is used during exploration and production of natural gas. As stated in our response to IND1-2, the FERC does not regulate the exploration or production of natural gas. In fact, fracking is not part of the Project; and therefore, the environmental impacts associated with that activity will not be analyzed in our environmental document. See response to IND1-3.

IND151-4 The potential for an earthquake or tsunami to occur at the proposed LNG terminal site, and potential effects of an earthquake or tsunami on the LNG terminal have been factored into our review and are discussed in the EIS. Proposed design features as well as our additional recommendations to address siting the LNG terminal at the proposed location are included in section 4.13 of the EIS.

IND151-5 Nowhere in the DEIS is there a statement that the Project would be in the "public interest." In fact, the Commission would make its finding of public benefit in its decision-document Project Order. The EIS is not a decision document. The Commission would issue its Order after we have produced an FEIS.

IND151-6 The pipeline would be designed and constructed according to Class Locations required by DOT regulations as described in section 4.13.9.1 of the EIS. The risk associated with construction and operation of the proposed pipeline, and measures that would be implemented to reduce that risk, are discussed in section 4.13.9 of the EIS.

IND151-7 General effects on fish and other aquatic resources are discussed in section 4.6.2. Effects on listed species, including salmon, are presented in section 4.7.1.3.

IND151-8 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150202-5259 FERC PDF (Unofficial) 2/2/2015 4:10:57 PM

IND152

Rishia Mitchell, North Bend, OR.

I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. So, I believe that Jordan Cove has submitted and complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND152-1

IND152-2

**IND152 Rishia Mitchell, North Bend, OR**

IND152-1 Comment noted.

IND152-2 The Blue Ridge alternatives are discussed in section 3.4.2.2.

20150202-5267 FERC PDF (Unofficial) 2/2/2015 4:16:20 PM

IND153

Rishia Mitchell, North Bend, OR.  
I have reviewed the Draft Environmental Impact Statement and concur with FERC's findings. As with any project, the community and environment will be affected to a certain degree. The mitigation measures Jordan Cove Energy (JCE) has proposed and/or agreed to incorporate into both the short and long term construction/operation of these facilities drastically reduces these adversities. In reviewing this document it is evident that both FERC and JCE have gone above and beyond in ensuring this project will be a success to all parties involved. I ask that FERC proceed with the permitting process to grant JCE their permit for this project. I also urge you to review the alternate Blue Ridge Route for the pipeline. Although both are viable options, it appears that the Blue Ridge Route would be a more suitable region, as it affects less private parcels, and above all greater public safety both during construction and operation.

IND153-1

IND153-2

**IND153 Rishia Mitchell, North Bend, OR**

IND153-1 Comment noted.

IND153-2 The Blue Ridge alternatives are discussed in section 3.4.2.2.

20150202-5270 FERC PDF (Unofficial) 2/2/2015 4:25:24 PM

IND154

Kimberly Payne, Coos Bay, OR.  
I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. So, I believe that Jordan Cove has submitted and complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND154-1

IND154-2

**IND154 Kimberly Payne, Coos Bay, OR**

IND154-1 Comment noted.

IND154-2 The Blue Ridge alternatives are discussed in section 3.4.2.2.

20150202-5271 FERC PDF (Unofficial) 2/2/2015 4:27:14 PM

IND155

**IND155 Kimberly Payne, Coos Bay, OR**

IND155-1 Comment noted.

Kimberly Payne, Coos Bay, OR.  
I have read the draft EIS that FERC has put together on the Jordan Cove Energy Project, I agree with FERCs findings. FERC has looked at every aspect of this project and analyzed each potential issue that may come about during construction as well as after construction is completed. This is a large project and yes it is going to be very evident that something big is going to be coming into our community but as FERC has laid it out there are a lot of steps explained in this document that are going minimize the damage during construction as well as steps to ensure that everything is put back to as close as natural prior to beginning of project. I would like to ask you to move forward with the permitting process so we can be one step closer to one of the largest things that Coos County has had the opportunity to be a part of in many years

IND155-1

20150203-5003 FERC PDF (Unofficial) 2/2/2015 6:37:27 PM

IND156

James and Archina Davenport, Coos Bay, OR.  
Docket No. CP13-492-000

My name is Archina Davenport. My husband, Jim, and I live on 61954 Old Wagon Road in Coos Bay, OR, which can be seen on page 3-27 #12 in Williams Pacific Connector's filed DEIS. We are writing to FERC as individual adversely affected landowners on the proposed Pacific Connector pipeline route running through Coos County.

These comments factually demonstrate that the DEIS conclusion that the Proposed Route is environmentally preferable and that the Blue Ridge Alternative Route has no significant environmental advantage is without basis because:

- DEIS rationale that Blue Ridge Alternative Route would impact critical habitat is in error because no critical habitat exists in the vicinity of the Blue Ridge Alternative Route. | IND156-1
- The amount of LSOG Forest impacted by Blue Ridge Alternative Route would be an inconsequential 0.00014 of total LSOG on Coos Bay District BLM. | IND156-2
- Blue Ridge Alternative Route would not cross an additional northern spotted owl home range compared to the Proposed Route. | IND156-3
- DEIS assertion that property values would not be affected lacks analysis and is in error. | IND156-4
- Proposed Route would impact a contaminated site with hazardous substances. | IND156-5
- DEIS violates NEPA regulations and requirements in every instance when comparing impacts of Blue Ridge Alternative Route and Proposed Route. | IND156-6
- DEIS comparison of Blue Ridge Alternative Route and Proposed Route contains many substantive factual errors, incomplete information and omission of essential information. | IND156-7
- DEIS comparison of Blue Ridge Alternative Route and Proposed Route has no analysis, discussion or exposition of cataloged environmental effects. | IND156-8
- Proposed Route violates Pacific Connector's criteria to avoid impacts to waterbodies by locating the pipeline on ridgetops such as the Blue Ridge Alternative Route. | IND156-9
- Proposed Route violates Pacific Connector's criteria to avoid geologic hazards where feasible. | IND156-10
- These comments factually demonstrate that the Blue Ridge Alternative Route is environmentally preferable and has significant environmental advantages because:
- Blue Ridge Alternative Route would be located on stable ridgetop and avoid a rapidly moving land slide crossed by the Proposed Route. | IND156-11
- Blue Ridge Alternative Route would cross landslides totaling 4,370 feet while the Proposed Route would cross landslides totaling 8,850 feet |
- Blue Ridge Alternative Route would avoid three floodplains which the Proposed Route would cross in violation of Executive Order 11988 | IND156-12
- Blue Ridge Alternative Route would cross only 9 waterbodies while the Proposed Route would cross 65 waterbodies. | IND156-13
- Blue Ridge Alternative Route would not impact any domestic water sources while the Proposed Route would impact two domestic water sources. | IND156-14

## IND156 James and Archina Davenport, Coos Bay, OR

- IND156-1 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-2 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-3 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-4 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-5 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-6 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-7 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-8 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-9 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-10 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-11 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-12 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-13 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-14 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.



20150203-5003 FERC PDF (Unofficial) 2/2/2015 6:37:27 PM

- Blue Ridge Alternative Route would cross 23 landowner parcels with 3 homes while the Proposed Route would cross 61 landowner parcels with 33 homes. | IND156-15
  - Blue Ridge Alternative Route would have no eminent domain issues while on the Proposed Route 15 landowners have expressed their intention to legally resist right-of-way acquisition by PCGP. | IND156-16
  - Blue Ridge Alternative Route would cross less fish bearing streams than the Proposed Route | IND156-17
  - Blue Ridge Alternative Route parallel to ridgetop logging roads would have significant less environmental impact than Proposed Route collocated on rugged, broken and difficult terrain of the EPA power line right-of-way. | IND156-18
  - Blue Ridge Alternative Route impact to Late-Successional Reserves would be an inconsequential 0.00005 of total Late-Successional Reserves on Coos Bay District BLM. | IND156-19
- Our personal impact from Williams Pacific Connector's proposed route;
- The Pacific Connector pipeline is not needed in Oregon, and it is certainly not convenient on the route the company has filed with FERC. The project would merely benefit out-of-country investors at the expense of our land and Oregon's natural resources. As both of our families have a history in the military as fighting for our country, it is difficult to understand how a foreign country can take away our land for use in another foreign country for the profit of big corporations. | IND156-20
- Most importantly, this pipeline should not be on or near our property, or any property on the incredibly steep and constantly shifting terrain that makes up the Old Wagon Road neighborhood. Please consider the following environmental, human, and personal property concerns: | IND156-21
1. Stream Disturbance
    - a. There is a stream that passes through our property right at the bottom of the steep ridge where Pacific Connector plans on putting the pipeline and staging area. Eventually, the pipeline even crosses this stream. The forms and maps Pacific Connector sent me give no indication of bottlenecking or related mitigation efforts to lessen the damage of the crossing. This stream also serves as the water source for our Neighbors David and Jonell McGriff. | IND156-22
  2. Unstable ridge
    - a. Williams inaccurately portrays the elevation gain and loss on the filed route. The ridge where they plan on putting the pipeline and staging area is completely unsuitable for such purposes. It has never dealt with any serious excavation and is held up by a retaining wall. Any continuous trench is guaranteed to cause landslides. | IND156-23
  3. Underground springs
    - a. Both the ridge and stream will also be damaged by the multitude of underground springs that would be exposed by excavation and would cause added, continuous erosion of the land. | IND156-24
  4. Sewage system
    - a. The pipeline route runs directly through our sewage system. | IND156-25

## IND156 Continued, page 2 of 3

- IND156-15 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-16 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-17 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-18 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-19 Your preference for the blue ridge route as you believe it to be the less environmental impact route is noted. Responses were developed for all substantive comments submitted.
- IND156-20 Comment noted.
- IND156-21 Comment noted.
- IND156-22 Stream crossings are discussed in section 4.4.1.2. Note the requirements for crossing plan (for both roads and the pipe) in chapter 5.
- IND156-23 Detailed design plans that include geotechnical evaluations would be required prior to construction.
- IND156-24 The applicant is required to repair all damage caused by construction.
- IND156-25 During easement negotiations with private landowners Pacific Connector would identify exact locations of individual sewage systems, water supply wells, etc., that have been previously unidentified (for example on properties where survey permission has been denied), and adjust the pipeline location within that property if possible, or develop other measures (for example installation of a replacement system), as needed to avoid permanent damage to those systems.

20150203-5003 FERC PDF (Unofficial) 2/2/2015 6:37:27 PM

5. Violation of mortgage contract  
a. Agreeing to this pipeline directly violates our mortgage contract,  
which prohibits us from doing anything environmentally unsafe or that  
devalues our property. | IND156-26  
Please move the section of the pipeline from MP 11.13R and MP 21.6 onto  
Blue Ridge where its potential damage to our community would be greatly  
mitigated. | IND156-27

James and Archina Davenport  
61954 Old Wagon Rd.  
Coos Bay, OR 97420

**IND156 Continued, page 3 of 3**

- IND156-26 The risk associated with construction and operation of the proposed pipeline and measures that would be implemented to reduce that risk are discussed in section 4.13.9 of the EIS.
- IND156-27 Comment noted.

20150202-0096 FERC PDF (Unofficial) 02/02/2015

Att: Kimberly Bose, Secretary FERC  
888 First St. NE, Room 1A  
Washington DC 20426

To whom it may concern;

This letter is in response to the Federal Energy Regulatory Commission's Draft for the proposed Jordan Cove LNG Terminal and Pipeline. The Canadian Company, Veresen, is proposing to transport methane via pipelines through rugged Oregon terrain, and process it at a Coos Bay, Oregon site, into liquefied natural gas to be exported to Asia.

We are extremely concerned for the public safety and environmental degradation. Following are facts we are asking FERC to reconsider.

1. We vehemently request that FERC reconsider the impact of Fracking on the environment and quality of living for the American public. | IND157-1
2. We ask that FERC reconsider the long term effects to our environment due to climate change as outlined in the Intergovernmental Panel on Climate Change 11-1-14 report. | IND157-2
3. We ask that FERC reconsider the impact to public health and safety in regards to the transporting of methane via pipelines that are subject to leakage. | IND157-3
4. That FERC reconsider the public health and safety in regards to the proposed location for the processing of LNG. Coos Bay, Oregon is in an earthquake and tsunami zone. | IND157-4
5. That FERC reconsider the Human suffering of 300 hard working, tax paying American families impacted by this proposal. These Oregonians would have to endure loss and hardships due to the sole benefit of a foreign company. | IND157-5
6. That FERC reconsider the extreme and irreversible damage to the environment and endangered species that are protected under the Endangered Species Act. | IND157-6

There is no 'public benefit' as suggested by Veresen. | IND157-7  
Fracking is an environmental and public hazard.  
Methane is 86 times more potent greenhouse gas than burning coal.  
Climate Change is real.  
300 Oregonians do not want pipelines to go through their properties.  
Degradation of 70 miles of public land and wildlife reserves is a blatant disregard for the American public and endangered species in the Endangered species Act.  
A lack of adequate safety precautions should the 80 million gallon LNG tanks have a cooling failure.  
Public safety hazard should the pipeline have leaks is intolerable. | IND157-8

IND157

ORIGINAL

CP13-492  
CP13-483

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## IND157 Randy Turner and Sandra Medina, Roseburg, OR

- IND157-1 See the response to IND1-3.
- IND157-2 See the response to IND1-1.
- IND157-3 See the response to IND1-2.
- IND157-4 See the response to IND1-4.
- IND157-5 Comment noted.
- IND157-6 Impacts to listed species are disclosed in section 4.7. A BO prepared by NMFS and FWS would establish the requirements of protecting listed species, as well as the required mitigation.
- IND157-7 Comment noted.
- IND157-8 The risk associated with construction and operation of the proposed pipeline and measures that would be implemented to reduce that risk are discussed in section 4.13.9 of the EIS.

20150202-0096 FERC PDF (Unofficial) 02/02/2015

IND157 Continued, page 2 of 2

Our last point is, that future generations of Americans will need this natural gas for their benefit just as us Americans are enjoying the benefit now, it is our legacy to not ~~use~~ up all the resources for profit.

Handwritten signatures of Randy Turner and Sandra Medina in black ink.

Randy Turner and Sandra Medina  
3384 Amber Lane  
Roseburg, Oregon 97471

20150202-0097 FERC PDF (Unofficial) 02/02/2015

ORIGINAL

Jan. 16, 2015

IND158

Kimberly Bose, Secretary  
FERC  
888 First St. NE, Room 1A  
Washington, DC 20426

CP13-492  
CP13-483

I am writing to voice my opposition to the LNG pipeline from Malin, Or. To Coos Bay, Or.

IND158-1

This use of imminent domain – to benefit a private, foreign corporation is wrong. This is a misuse of imminent domain and should not be permitted.

IND158-2

This pipeline will be going through wilderness that is valuable and sensitive.

There is little benefit economically to the OR. economy and NO benefit to the private citizens who are having their land and use of that land stolen from them.

Would you like to have this pipeline running through your property?

I find it difficult to believe that this pipeline was ever even considered. What is happening to this country?

Sincerely,

Kris Bennett

Kris Bennett  
388 Bellwood Ln  
Roseburg, OR  
97471

RECEIVED  
FEB 2 2015  
CP13-492  
CP13-483

**IND158 Kris Bennett, Roseburg, OR**

IND158-1 Comment noted.

IND158-2 See the response to IND1-5.

20150203-5009 FERC PDF (Unofficial) 2/2/2015 9:42:29 PM

IND159

Elaine Fischer, Roanoke, VA.

The RISKS are too high and too many. There's NEVER been a pipeline built that didn't leak! The air, soil and water could easily be ruined for generations.

Also, how does EXPORTING American gas help American Energy Dependence?

IND159-1

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

IND159-2

Natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

IND159-3

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

IND159-4

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

IND159-5

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

IND159-6

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

IND159-7

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had

IND159-8

## IND159 Elaine Fischer, Roanoke, VA

- IND159-1 The decision to export or not export natural gas is not under the authority of FERC.
- IND159-2 See the response to IND1-1.
- IND159-3 See the response to IND1-2.
- IND159-4 See the response to IND1-3.
- IND159-5 See the response to IND1-4.
- IND159-6 See the response to IND1-5.
- IND159-7 See the response to IND1-7.
- IND159-8 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.

20150203-5009 FERC PDF (Unofficial) 2/2/2015 9:42:29 PM

**IND159**      **Continued, page 2 of 2**

been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

IND159-8  
continued

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND159-9

IND159-9      The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150203-5012 FERC PDF (Unofficial) 2/2/2015 11:45:26 PM

Michael W Evans, Los Angeles, CA.

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

Natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

IND160

IND160-1

IND160-2

IND160-3

IND160-4

IND160-5

IND160-6

IND160-7

## IND160 Michael W. Evans, Los Angeles, CA

IND160-1 See the response to IND1-1.

IND160-2 See the response to IND1-2.

IND160-3 See the response to IND1-3.

IND160-4 See the response to IND1-4.

IND160-5 See the response to IND1-5.

IND160-6 See the response to IND1-7.

IND160-7 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.



20150203-5012 FERC PDF (Unofficial) 2/2/2015 11:45:26 PM

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.///

IND160-8

**IND160**      **Continued, page 2 of 2**

IND160-8      The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150203-5013 FERC PDF (Unofficial) 2/3/2015 12:21:38 AM

IND161

william toner, mcgraw, NY.  
The Jordan Cove LNG project must not be allowed to occur as it would  
devastate thousands acres of rainforest in southern Oregon.

IND161-1

**IND161 William Toner, McGraw, NW**

IND161-1 No rainforest would be affected by the pipeline, see table 4.5.1.2-1 that lists the forest types that would be affected. Approximately 1,742 acres of forest and woodland would be cleared for the pipeline and another 506 acres would be cleared for extra temporary work areas. The amount of forest cleared would be a very small percent (mostly between 0-2 percent) of any watershed crossed by the Project (see table 4.14.3-1).

20150203-5015 FERC PDF (Unofficial) 2/3/2015 12:47:22 AM

**IND162**      **Jim Warzala, Crystal Falls, MI**

IND162

IND162-1      Comment noted.

JIM WARZALA, CRYSTAL FALLS, MI.

STOP THE JORDAN COVE LNG TERMINAL & PIPELINE - NOW.  
STOP FRACKING NOW - IT'S A DISASTER WAITING TO HAPPEN.  
METHANE IS 86 TIMES WORSE THAN GREENHOUSE GAS FROM BURNING COAL.  
STOP ANYTHING HAZARDOUS BEING BUILT ON EARTHQUAKE ZONES.  
REQUIRE ANY PROJECTS BE BUILT TO HIGHER SAFETY STANDARDS - EVERYWHERE.  
STOP ALL CLEAR CUTTING - EVERYWHERE.  
STOP FOREIGN COMPANIES TO USE EMINENT DOMAIN.  
SAVE & PROTECT OUR ANIMALS & ENVIRONMENT.  
STOP VERESSEN FROM DESTROYING OUR ENVIRONMENT.

IND162-1

20150203-5017 FERC PDF (Unofficial) 2/3/2015 1:14:42 AM

IND163

Zechariah, Grants Pass, OR.  
FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

IND163-1

Natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

IND163-2

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

IND163-3

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND163-4

## IND163 Zechariah, Grants Pass, OR

IND163-1 See the response to IND1-4.

IND163-2 See the response to IND1-2.

IND163-3 See the response to IND1-1.

IND163-4 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150203-5058 FERC PDF (Unofficial) 2/3/2015 10:03:52 AM

IND164

Kian Daniel, MILWAUKEE, WI.

Please listen to the people! This should not be happening.

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

IND164-1

Because natural gas is methane, a percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. Methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

IND164-2

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

IND164-3

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

IND164-4

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

IND164-5

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

IND164-6

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

IND164-7

## IND164 Kian Daniel, Milwaukee, WI

IND164-1 See the response to IND1-1.

IND164-2 See the response to IND1-2.

IND164-3 See the response to IND1-3.

IND164-4 See the response to IND1-4.

IND164-5 See the response to IND1-5.

IND164-6 See the response to IND1-7.

IND164-7 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.

20150203-5058 FERC PDF (Unofficial) 2/3/2015 10:03:52 AM

**IND164      Continued, page 2 of 2**

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND164-8

IND164-8      The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150203-5071 FERC PDF (Unofficial) 2/3/2015 11:22:01 AM

IND165

Laura Herndon, Burbank, CA.  
This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon. FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND165-1

IND165-2

**IND165 Laura Herndon, Burbank, CA**

- IND165-1 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.
- IND165-2 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150203-0012 FERC PDF (Unofficial)  
CP13-483

Dear Ms. Kimberly Bose,

Comments on Jordan Cove Energy Project — January 27, 2015

I have been in the public health and medical field for 37 years. When a new treatment or new drug comes on the market, it is tested before approval. After-market research is done to monitor the risk/benefit profile of the treatment or drug. Sadly, many times the risks outweigh the benefits long term, and the treatment/drug is withdrawn. We have plenty of information about the long term risks to the environment and human health from projects such as Jordan Cove. But I have been unsuccessful in determining which agencies are looking at the long term environmental risks of the Jordan Cove Project.

Oregon Department of Environmental Quality (DEQ) tells us it is only charged with analyzing the risks to water quality in installing the pipeline. Installation will involve a 230-mile liquid gas pipeline, crossing 400 waterways which would significantly harm fish habitat during installation and for years to come. Several million cubic yards of stream gravel and estuary bed will be disrupted, displaced and dredged, damaging sensitive aquatic areas necessary to the health of many native fish species including salmon. This is an important natural resource to Oregon and cannot be discounted easily. Many lives depend on healthy waterways and fisheries.

Most concerning to me, it appears that no government agency is responsible for doing a risk-benefit analysis of the cumulative, long-term risks of such a project to the environment and human health.

Jackson County's Emergency Management Program is a relatively new, weakly funded department and is tasked with responding to a disaster after it happens. Emergency Preparedness within Jackson County's Health and Human Service is likewise underfunded and barely staffed. But both departments (management and preparedness) agree that a major earthquake is due for our area and that the southern Oregon Coast has the largest risk for a big hit. The Great Cascadia Earthquake of January 26, 1700 was the same kind that destroyed the Fukushima nuclear plant in Japan in 2011. It was a subduction zone quake, the most severe kind. Oregon State University researchers estimate there is a 40 percent chance "the big one" could happen in the next 50 years. That means it could be 60 years away or longer. It also means it could happen tomorrow. The Jordan Cove pipeline and export facility will always be at risk for leaks, breaks and explosions. This is part of doing business in the fossil fuel industry, but the risk is magnified by our earthquake prone, rural, mountainous, forested geology.

At the present time, there is no justification for risking Oregon's most precious natural resources and the safety of its residents in order to send fracked natural gas to Asia.

This is not in the best interest of the citizens of Oregon. I strongly urge you to look at the long term environmental consequences to the Jordan Cove Project and stop it now.

Susan Bizeau RN

Susan Bizeau, RN

175 Arnos Rd., Talent, Oregon 97540, [sbizeau@q.com](mailto:sbizeau@q.com), 541-535-3522

ORIGINAL

IND166

IND166-1

IND166-2

IND166-3

## IND166 Susan Bizeau, Talent, OR

IND166-1 The FERC does not engage in cost-benefit analyses, as such. Instead, the Commission developed a "Certificate Policy Statement" (Certification of New Interstate Natural Gas Pipeline Facilities, 88 FERC ¶ 61,227 (1999), clarified in 90 FERC ¶ 61,128, and further clarified in 92 ¶ 61,094 (2000)) that established criteria for determining whether there is a need for a proposed project and whether the proposed project would serve the public interest. The Certificate Policy Statement explains that in deciding whether or not to authorize new natural gas facilities, the Commissioners must balance public benefits against potential adverse economic and environmental consequences. The DEIS discloses the potential impacts of construction and operation of the Project on environmental resources, such as effects on wildlife, and outlines measures that would be implemented to avoid, minimize, or mitigate those impacts. The DEIS also discloses benefits of the Project, such as job creation and increased payment into local tax bases. In terms of global warming, see response to IND1-1.

IND166-2 See the response to comment IND1-4.

IND166-3 Comment noted.



20150203-0031 FERC PDF (Unofficial) 02/03/2015

Docket Numbers CP13-483-000 & CP13-492-000

IND167

Letter to Federal Energy Regulatory Commission

Kimberly D. Bose

Secretary,

Federal Energy Regulatory Commission

888 First Street N.E. Room/A Washington D.C. 20426

ORIGINAL

FILED  
SECRETARY OF THE  
COMMISSION

2015 FEB -3 A 9:48

FEDERAL ENERGY  
REGULATORY COMMISSION

I would like to address in regards to the Climate Change as environmental quality. I belong to this organization that is SOCAN it is about Climate Change and also to bring attention to what would be disaster to Oregon and has already done to other states by pipeline leaks. One already a Historical Park that is Yellowstone had fifty thousand gallons of gas spilled into the water ways of the Park. The ocean disasters of oil spilled that has devastated all ocean wild life. Our tax dollars paying for all the damage caused by the leaks and spills. The water ways here in Oregon going through 400 of streams and also going through public lands. Farmers have had their share of problems and we need to preserve the farms and habitat that will be destroyed and sediment from fracking the fill dumped into Salmon strong holds through South West Oregon. Extensive new dredging in with fill dumped into Salmon strong holds also.

All our gas will just be going to China and Asia and Canada will be outsourcing our gas to other states. It is not going to be that great since the jobs are not permeate and are part time and then when the pipeline is in then the jobs will be few then still have ships from the Ports of Coos Bay when are built bigger to take up the areas. Maybe a spill could arise of the pipeline being no guarantee of distinction of forest lands and trees to be taken out as we lost plenty already but fires and now we do not want any exploding incidences to happen. Our firemen had their share of trying to put out plenty of fires and took most of what was green and beautiful that takes years to replace not just with bushes. Trees are a filter and helps also with air quality. I almost had my house burn down a year ago and I could not see out

IND167 Barbara Gurschke, Medford, OR

20150203-0031 FERC PDF (Unofficial) 02/03/2015

**IND167**      **Continued, page 2 of 2**

and was selling my home smoke was devastating and could cause medial problems with lungs.

There is so much to cover with this pipeline and if you care about our Country why do this. Survival interests are at stake. Scientist now say that the pipelines are already a cause of Climate change 25 % that we are experiencing.

So many are protesting this in different states at least one thing I want to be able to sleep nights knowing that there is not going to be any more destruction of pipeline it is a bomb as far as I can see. I feel sorry for the wildlife already had oil spills in the ocean our poor fish, oyster beds and what ever life is left in the ocean . The earth is warming and our climate is changing getting worse. It is real and we have to figure the future.

I for one love the ocean and love water falls, and drinking water, Birds and wildlife, beautiful mountains, Trees, Green land with life and flowers, gardens, fruit on the trees, horses running though the green fields, grapes, fruit trees and deer, elk, swim areas and beautiful Parks with boating and fishing.

Why mess up fess up and do the right thing. I know there is more that I did not cover so saving for the next person's who feel the same as I do.

Thank you for taking time to read my letter hope you will consider those thoughts and stop this pipeline!

IND167-1

Sincerely,

Barbara Gurschke

PO, Box 4134  
Med-Ford, OR  
97501

IND167-1      Comment noted.

20150203-0033 FERC PDF (Unofficial) 02/03/2015

IND168

ORIGINAL

FILED  
SECRETARY OF THE  
2490 Adams Street  
Eugene, Oregon 97405  
January 29, 2015  
2015 FEB -3 A 9 42  
FEDERAL ENERGY  
REGULATORY COMMISSION

Kimberly Bose, Secretary  
FERC  
888 First St. NE, Room 1A  
Washington, DC 20426

RE: Docket Numbers CP13-483 and CP13-492

TO: FERC

I am concerned about the proposal to move forward on the Jordan Cove and Pacific Connector Project. In Oregon public officials indicate that we need to do more to protect people from the deadly results of a possible earthquake along the Cascadia Subduction Zone. It does seem more than risky to consider building a liquid natural gas terminal and an LNG pipeline in the Coos Bay area, right in the Cascadia Subduction Zone area. This area, according Oregon State University, is along the section of the Cascadia Subduction Zone that is most likely to have an earthquake in the near future.

IND168-1

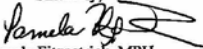
The country is quickly accepting that we need to reduce our dependence on fossil fuels in order to reduce our release of carbon into the atmosphere. Even with the significant reduction in the price of gasoline, alternative energy projects are moving forward. It is predicted that the Jordan Cove LNG terminal would quickly become the largest source of carbon and other green house gases in Oregon, after the closure of the PGE coal plant in Boardman, Oregon.

IND168-2

In addition, I find it strange that you release a draft environmental impact statement that is over 1,000 pages. According to the National Environmental Policy Act a DEIS should be accessible to the public. This is clearly not accessible. It doesn't matter that you release an executive summary. We should be able to read the entire evaluation within a reasonable amount of time, for people with jobs and family.

IND168-3

Like other countries we can take serious steps to reduce our carbon emissions, this project takes us in the exact opposite direction.

Sincerely,  
  
Pamela Fitzpatrick, MPH

**IND168 Pamela Fitzpatrick, Eugene, OR**

IND168-1 See the response to IND1-4 and IND73-16.

IND168-2 See the response to IND1-1.

IND168-3 The DEIS was accessible to the public and could be found electronically on the internet through the FERC web page on our eLibrary system. We appreciate that the DEIS was a lengthy document and doubled the typical comment period, providing 90 days for comments.

20150203-0032 FERC PDF (Unofficial) 02/03/2015

January 2015

From M.R. Buddenhagen  
19145 Upper Cow Creek  
Azalea, OR 97410  
541-837-8321  
[cobalot@hughes.net](mailto:cobalot@hughes.net)

Comments on the Federal Energy Regulation Commissions' Environmental Impact  
Statement docket # CP13-492-000 and CP13-483-000

My first comment/request is to please extend the comment period. The average, even above average, U.S. citizen does not have time to read a 5000 page complex statement over the winter holiday season. I think it would be more than fair to extend the comment period.

My second request is to please make it clear how this pipeline and the Jordan Cove terminal. will benefit US citizens in general and Oregonians in particular. I would like to understand what's in it for me? I see a lot of potential risks, dangers, environmental destruction/degradation, taxpayer's costs, noise pollution, disturbance, water pollution, degradation of our Coos Bay Harbor and fishing industry and not a lot of benefits on the other side of the equation. Please clarify so we can justify the proposal to use eminent domain on our neighbors and compromise our environment.

I live in the Cow Creek Valley which is one of the watersheds that the pipeline is proposed to run through. I irrigate my gardens, orchard and pastures with the Cow Creek water. I am very concerned about the water quality changes that are likely to take place if the pipeline is built across the upper part of our entire watershed.

**LANDSLIDES** One of the most common factors for landslides is earth disturbance by large machinery. My understanding is that the ditch that would be dug for the pipeline would be at least 7 feet deep in the low spots. How deep would it have to be in the higher parts? What would be done to reduce the likelihood of landslides? This country is very steep, ridges, cliffs, hillsides, clay deposits, old mercury mines, mercury containing earth and filtering wetlands with lots of water rivulets, creeks, runoff . . . I would like to see what you think the environmental effects would be if such a landslide was to occur both during construction and afterwards?

**ROADS** How would the construction of roads and heavy traffic to log and access the proposed pipeline route effect the environment? Landslide potential? Sediment creation? Spread of noxious weeds? Compaction? Also on a more personal note, how will the traffic on our one lane road that accesses the area effect our noise level and road safety? Would they have to widen the road thus taking our land?

**SEDIMENT:** One of my main concerns is the likely increase of sediment in the creek and running through my pump, irrigation lines and sprinklers. We get some very heavy rains here and I can't imagine that this logging, road

IND169

IND169-1

IND169-2

IND169-3

IND169-4

IND169-5

## IND169 M.R. Buddenhagen, Azalea, OR

- IND169-1 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.
- IND169-2 The FERC EIS disclosed environmental effects of the Project. The Commission will determine whether there is a need for a proposed project and whether the proposed project would serve the public interest. In deciding whether or not to authorize new natural gas facilities, the Commissioners must balance public benefits against potential adverse economic and environmental consequences. The DEIS discloses the potential impacts of construction and operation of the Project on environmental resources, such as effects on wildlife, and outlines measures that would be implemented to avoid, minimize, or mitigate those impacts. The DEIS also discloses benefits of the Project, such as job creation and increased payment into local tax bases. In terms of global warming, see response to IND1-1.
- IND169-3 Seismic and landslide hazards for the pipeline are disclosed in section 4.22.2. For trench depth, see pages 2-106 and 2-107 in chapter 2 of the DEIS.
- IND169-4 If the pipeline parallels a public roadway, the pipeline would not be placed directly beneath the road surface. In this situation the pipeline would be offset from the roadway or road easement such that operation and maintenance of the roadway and the pipeline would not interfere. Where the pipeline would make a perpendicular crossing of a public roadway, the pipeline crossing must be permitted by the appropriate authority (e.g., state DOT or county public works department). Typically, these regulating authorities require a perpendicular crossing of a public roadway to be designed to account for existing and expected future traffic loads and roadway maintenance, and no restrictions on future traffic would be required. Section 4.12.2.4 discusses noise levels during construction. Following construction, noise levels would return to pre-construction levels.
- IND169-5 Effects to streams (including measures to minimize increases in turbidity) are discussed in section 4.4.2.2.

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construction and huge ditch digging operation wouldn't add sediment to our river system. Please address this in the impact statement.

IND169-5  
continued

MERCURY contamination: The Galesville Reservoir below us has warnings about the dangers of consuming fish caught there because of the high mercury levels. The area where they propose to build the pipeline has old tailings from mercury mining and obviously mercury deposits. Have these been identified and analyzed as to what the likely increase of mercury would be in our irrigation water and on down the river? I understand that the pipeline company proposes to fertilize/and or herbicide the logged strip above the pipeline. Would the fertilizer/herbicide end up in my irrigation, and on down river? If not, why not?

IND169-6

WETLANDS are known to filter and hold water. Please address the environmental results of digging up and blocking these precious wetland filters. Would it decrease the water flow in times of drought? Will it mean that the water quality is decreased because of less filtration? How will the 7 foot plus deep pipeline and bentonite wall effect the flow of the water? Will it go over or under? How will this change the environment? This proposal has inspired me to go up and look at the wetlands that are threatened. They are really remarkable in the diversity in and around them. How would the proposed disturbances effect the established flora and fauna?

IND169-7

WATER TEMPERATURE INCREASE I would like to see the environmental impact study address the likelihood and results of a water temperature increase resulting from exposing multiple places of the waterways to sunlight. Our entire watershed is currently heavily shaded by old growth timber. For example, how would even a one degree rise in water temperature effect, the many life forms that live in and around the waterways? I know that increased water temperatures increase algae growth. How would this effect the stream and my irrigation system?

IND169-8

FIRE Our Douglas Fire Protection Agency states that "most forest fires are started by logging operations". What would the environmental effects be if a forest fire was started in this remote heavily forested part of the National Forest? Our Forest Service Ranger says this area is an extreme risk for fire anyway. Also please specify who would be financially responsible for putting out such a fire and how would they need to go about it? What would such a fire do to the creek?

IND169-9

There needs to be two different impact studies in regards to the timing of the construction If it is to happen in the fire danger/ dust season, one set of impacts needs to be covered. We are often banned in the fire season from even running a weed-eater in open areas. The fire danger is enormous here in the summer.

If it is to happen in the rainy season another set of impacts needs to be addressed. We can get eight inches of rain in a three day period. The runoff after a big rain is incredible!

IND169-10

Another concern of mine is the water that will be used to test the pipeline after it's built. I think the impact of, the removal of and disposal of this huge amount of water has not been thoroughly addressed in your statement. Where will it come from and where

IND169-11

## IND169 Continued, page 2 of 3

IND169-6 As noted in section 4.2.2.1 of the DEIS, the Pacific Connector pipeline route would be in the vicinity of three historic and abandoned cinnabar or mercury mines (Nivinson, Red Cloud, and Thomason) between mileposts (MP) 108 and 110. Section 4.4.4.2 of the DEIS discussed concerns over mercury contamination from these mines entering into the nearby East Fork of Cow Creek watershed and affecting aquatic resources. Based on several site-specific studies conducted by Pacific Connector (GeoEngineers 2009b) and the Forest Service (Broeker 2010), we concluded that it was highly unlikely that pipeline construction would encounter soils with elevated mercury concentrations in the vicinity of the abandoned cinnabar mines. In addition, Pacific Connector developed a Contaminated Substances Discovery Plan that contains measures to protect the public and the environment. Restrictions and proper use of herbicide during the projects construction and operation, as well as its effects, are addressed in section 4.5 of the DEIS.

IND169-7 Please see section 4.4.3.2 for measures to minimize effects on wetlands.

IND169-8 Effects on water temperature from pipeline construction are discussed in sections 4.4.4.2 and 4.6.2.3.

IND169-9 See section 4.13.9.1 for safety standards, including standards to minimize fire risk to forest lands (pages 4-990 to 992).

IND169-10 Comment noted.

IND169-11 See the requirements for using surface water for hydrostatic testing on pages 4-395 to 397 in section 4.4.4.2.2. These include obtaining permits from ODWR, which are subject to review by ODEQ and ODFW.

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exactly will it be released? How will that effect the areas in question? What about the possibility of invasive species traveling in the water? Does this justify the waste of precious water?

IND169-11  
continued

Accidents and leaks: If you were to look up the Compliance and Safety Records of Williams(WMB) Williams Partners L.P. (WPZ), Williams of Midstream, you would see how many lawsuits, accidents, leaks and fines they have been involved with. I think a more in-depth impact statement needs to be done regarding this proposal and addressing how any similar accidents will be redeemed, repaired, paid for and insured.

IND169-12

THE CASCADIA FAULTLINE: Have you heard about this? There is a very informative BBC documentary available online. I highly recommend that anyone involved in energy regulation or anything to do with the US/Canada western coastline watch it! [https://www.youtube.com/watch?v=vEgIjgnv\\_3c](https://www.youtube.com/watch?v=vEgIjgnv_3c)

The Cascadia fault is a result of the pacific plate moving under the continental plate. It explains the history of the huge movements, resulting in enormous earthquakes and tsunamis. . The last one was 315 years ago the one before that was 300 years before that. Of course earthquakes can not be precisely predicted but the fact that one will happen again is predictable and scientists are warning that it could very well be anytime now.

I think it is only prudent to include the environmental effects of the predicted shift of the Cascadia Fault Line, resultant earthquake and tsunami on the proposed projects. Please identify and explain what would happen if the pipeline broke or the Jordan Cove terminal was under water or shaken to pieces. I think it is important to clarify how something like this could be contained, AVOIDED and dealt with. We have had an example with the Japanese earthquake and tsunami. Please let's not endanger our citizens with a similar catastrophe in Oregon.

IND169-13

Since Russia has agreed to sell China a huge amount of their natural gas at a low price this all may be shelved in which case we have all wasted a lot of time and tax payers money. If the company pursues the plan, it goes from being a questionable proposal to an absurd one.

Canada, Washington state, and California have all denied this proposal in their area and now it's Oregon's turn to do the same.

Please do what you can to protect the planet, the water, the fish, the soil, the forest, the wildlife, the peace and safety of Oregonians. and the US citizens.

*MR. Buddenhagen Jan 25, 2015*  
MR. Buddenhagen

## IND169 Continued, page 3 of 3

IND169-12 Compliance with federal safety standards is administered by DOT, not FERC.

IND169-13 Welded pipelines have responded well to earthquakes in other areas with similar conditions, such as Chile. Seismic hazards are described in section 4.2.2.2.

20150204-5001 FERC PDF (Unofficial) 2/3/2015 5:20:05 PM

IND170

M. Lee Zucker, eugene, OR.

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

IND170-1

Natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

IND170-2

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

IND170-3

FERC did not consider impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay: FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and back-up power also failed, as in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

IND170-4

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

IND170-5

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

IND170-6

## IND170 M. Lee Zucker, Eugene, OR

IND170-1 See the response to IND1-1.

IND170-2 See the response to IND1-2.

IND170-3 See the response to IND1-3.

IND170-4 See the response to IND1-4.

IND170-5 See the response to IND1-5.

IND170-6 See the response to IND1-7.

20150204-5003 FERC PDF (Unofficial) 2/3/2015 6:02:33 PM

IND171

Martha Clemons, Corvallis, OR.  
Public Testimony to FERC: Coos Bay, Oregon, December 8, 2014  
Docket Number CP13-483-000

I believe that FERC must reject any and all permits for the proposed Jordan Cove Energy Project LNG terminal and connecting pipelines. There are many reasons why this project is a bad idea. I'll speak about one; the greenhouse gas, carbon dioxide or CO2. Although your DEIS addresses the CO2 emissions from the generating plant that will power the LNG terminal, it does not take into account the greenhouse gas (GHG) impacts from the additional fracking that will occur or the burning of exported US gas in foreign markets. These impacts cannot be reduced to less-than-significant levels.

The presence of CO2 in the atmosphere at such high levels as we have now (400ppm) warms the planet and destabilizes the climate. The debate is over about that! Research continues to support that global warming is a direct result of the build-up of carbon emissions in the atmosphere. This global warming results in such problems as severe and dangerous super storms, melting of the Greenland ice sheet, release of methane from melting permafrost, warming oceans, sea level rise and extinction of species.

The notion that natural gas is a "clean" alternative fuel is false. To extract gas by fracking (an environmentally destructive process in itself), transport it in pressurized pipelines that can leak and start forest fires, use tremendous amounts of energy to convert it to LNG and ship it overseas for burning there is unconscionable. Ultimately this process will release millions of tons of new CO2 and will contribute to an unstable and potentially unlivable climate. And what for? Enormous profits for a few while the systems that sustain life on Earth as we know it will be irretrievably damaged? It is morally wrong to leave a ransacked planet for our children and grandchildren and it is wrong to profit from that destruction.

The latest report from the Intergovernmental Panel on Climate Change states that there needs to be a huge shift away from carbon-intensive energy sources if we are to head off the worst effects of global warming. We must begin a rapid transition away from all fossil fuels, including natural gas, and keep the rest of that resource in reserve for future generations. You, the Federal Energy Regulatory Commission, have the obligation to regulate to that end and you must start now by denying all permits to build LNG terminals and connecting pipelines. And to Veresen I say: if you want to help the community of Coos Bay, you are an energy company. You could invest in helping us all to convert to renewable energy alternatives that would provide many more jobs in the long run. We would all thank you for that!

Thank you,

Martha Clemons

1320 NW 30th St  
Corvallis, OR 97330  
clemm12@comcast.net  
541-757-9627

**IND171 Martha Clemons, Corvallis, OR**

IND171-1 Comment noted.

IND171-2 See the response to IND1-3.

IND171-3 Comment noted.

IND171-1

IND171-2

IND171-3



20150204-5004 FERC PDF (Unofficial) 2/3/2015 6:19:51 PM

IND172

**IND172      Tracie L. Skinner, Coos Bay, OR**

IND172-1      Comment noted.

Tracie L Skinner, coos bay, OR.  
I have read the draft EIS and agree with FERC's findings. I feel that  
FERC has looked at all of the possible impacts and have filed a complete  
and accurate report. | IND172-1

20150204-5005 FERC PDF (Unofficial) 2/3/2015 6:22:53 PM

IND173

**IND173      Tracie L. Skinner, Coos Bay, OR**

IND173-1      Comment noted.

Tracie L Skinner, Coos Bay, OR.  
I have read the draft EIS and concur with FeERC's findings. I urge you to quickly move on to the next step of the permitting process. | IND173-1

20150204-5011 FERC PDF (Unofficial) 2/4/2015 1:12:24 AM

IND174

Barbara Mendelsohn, Grants Pass, OR.

For the following reasons, I strongly oppose this project:

1. This 230-mile long pipeline, needed to transport gas to the Coos Bay export terminal, would require clearcutting thousands of acres of rainforest in southern Oregon.

2. The Canadian corporation who wants to build this huge fossil fuel infrastructure, would be given an exemption to the rules protecting owls, salmon, and other endangered wildlife, to enable it to haul away over 7,000 log-truck loads of our public forests to clear the pipeline right-of-way. Veresen, the company, is also asking for the power of eminent domain to condemn up to 300 Oregonians' property for the pipeline, since 90% of the impacted landowners have refused them access.

3. The proposed terminal, with its highly flammable LNG storage tanks, has been deemed safe by Veresen, even though it would be built in the earthquake/tsunami zone over the alarm raised by a number of scientists who say the dangers are being significantly underestimated.

Please do not approve this project!

IND174-1

**IND174 Barbara Mendelsohn, Grants Pass, OR**

IND174-1 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7. Also see the responses to IND1-5 and IND1-1.

Docket Nos. CP13-483-000 and CP13-492-000  
DEIS Comments by Bob Barker  
February 3, 2015

IND175

Comments on DEIS

Topic	DEIS Page	DEIS Text (if needed)	Requested Actions Including Comments/Questions	
Safety	4-585 to 4-588		Pipeline safety standards are significantly lower for rural areas (Class 1 and 2) compared to urban areas (Class 3 and 4). According to Table 4.13.8.1-1 (4-587), 1.1 miles of the pipeline are in Class 3 areas, 8.1 miles in Class 2 and the remainder in Class 1. The different safety standards for these three classes are significant and place individuals in rural areas at significantly greater risk. <b>Request application of Class 3 standards, at the minimum, along the pipeline route wherever there is a residence within 1000 feet of the pipeline.</b> It seems criminal to place rural residents at greater risk because they live in a lower density area.  Table 4.13.9.1-2 identifies three DOT 3 locations and high consequence areas totaling 3.1 miles. <b>Please confirm that these three locations and their beginning and ending MP will be Class 3.</b>	IND175-1  IND175-2
Rogue River HDD Contingency Plan	4-386 to 4-506, 4-625		<b>Full review and public comment on Rogue River crossing alternatives in the event of an HDD failure should occur prior to the issuance of the Final EIS.</b> It is not appropriate to wait until an HDD failure to address a construction failure of this environmental and economic significance. If both the wet open-cut crossing and overhead alternatives are found to be unacceptable during this review, <b>The final EIS should include a statement that the proposed Rogue River crossing site will be abandoned in the event of an HDD failure. A failure should be defined as two unsuccessful attempts with the pilot hole, hole opening or pullback stages of the HDD.</b> Alternatives in the event of an HDD failure are not discussed or referenced in the DEIS (see pages 4-386-388).  In the event of a frac-out, the HDD Contingency Plan and Failure Procedure proposed by PCGP (Appendix 2H attached to Resource Report 2 of their application to the FERC) should be strengthened to provide additional protection to the environmentally sensitive Rogue River. <b>The HDD Contingency Plan and Failure Procedure should be modified to provide that drilling fluid pumps will be shut off and drilling will not resume until designated Federal and State inspectors visit the site, insure that appropriate containment procedures have been implemented, and approve resumption of drilling.</b>  Page 4-625 included a statement that use of HDD technology would avoid direct impacts on the river and would have no direct impacts on recreational users of the river. This is only true if the HDD is successful. HDDs can, and do, fail.	IND175-3 IND175-4 IND175-5  IND175-6  IND175-7

Page 1

**IND175 Bob Barker**

- IND175-1 See the response to IND1-7.
- IND175-2 The table identifies the beginning and end MPs of the DOT Class 3 locations. The text lists the requirements if the pipeline is built in a class 3 area. It is unclear what confirmation you are requesting.
- IND175-3 The crossing plan is included in Appendix 2G to Resource Report 2 of Pacific Connector's June 6, 2013 application with the FERC. The entire application is available in electronic format for public viewing via the internet on the FERC webpage ([www.ferc.gov](http://www.ferc.gov)) through our eLibrary system. Also see the HDD Contingency Plan was attached as Appendix 2H to Resource Report 2.
- IND175-4 Comment noted.
- IND175-5 Resource Report 2 states: Although GeoEngineers, Inc. (see Appendix 2G) indicates that an HDD of the Coos, Rogue, and Klamath rivers could be successfully implemented at the proposed crossing locations, in the event of an unsuccessful HDD at these proposed river crossings, the HDD method could be reattempted at the same location, or slightly offset. Pacific Connector could implement a DP crossing at the same location. The DP crossing method is described below and an overview of DP Technology is included in Appendix 2I. Direct Pipe (DPP) installation is a developing trenchless technology that can overcome problematic issues associated with the HDD crossing method because it provides a continuously supported hole during the excavation process. Appendix 2I is included in the Application noted above.
- IND175-6 Comment noted. See Appendix 2I discussed above.
- IND175-7 Comment noted.

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DEIS Comments by Bob Barker  
February 3, 2015

Topic	DEIS Page	DEIS Text (if needed)	Requested Actions Including Comments/Questions	
Inadvertent Release of Drilling Mud during Rogue River HDD			Pacific Connector should be required to post a bond for costs of any clean-up or environmental damage caused by the inadvertent release of drilling mud resulting from HDD operations.	IND175-8
Rogue River HDD Request for Drill Entry Point on West Side of River	4-909 to 4-911	Pacific Connector has not determined whether drilling would occur from the western or eastern end of the crossing	The DEIS states that the closest existing residence to the west end of the Rogue River HDD section is about 740 feet from the probable equipment location and the closest residence to the eastern end of the Rogue River HDD section is about 340 feet from the probable equipment location. Additionally, the noise levels on the west side of the river are significantly less as shown on Table 4.12.2.4-7 and Table 4.12.2.4-8. In view of the above information, request that the drill entry point be on the west side of the river.	IND175-9
Rogue River HDD Site - Noise	4-910 to 4-911		If actual noise levels exceed the dBA standard (above), drilling operations must be shut down until compliance with the standard is achieved. Noise monitoring should be continuous during drilling and pull back operations and procedures in place for shutting down immediately if noise levels are exceeded.	IND175-10
Rogue River -- Hydrostatic Testing Source	4-395 to 4-397 and 4-918		Page 4-396 of the DEIS identifies the Rogue River crossing as a potential hydrostatic source location with an estimated volume of 8,770,257 gallons. Specifics of the withdrawal, including analysis and impact, must be provided and made available for public comment before any permit is issued. Needed details include how the river will be accessed (i.e. from which side of the river), road construction to the river, equipment utilized and exactly how the water will be transported to the pipe (since it is a considerable distance to the drill entry and exit sites under the Rogue). Strongly recommend that the Rogue River not be used as a water source for hydrostatic testing. The public should have 30 days to comment on the Hydrostatic Test Plan once it is submitted.	IND175-11 IND175-12

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- IND175-8 The FERC does not require that either Jordan Cove or Pacific Connector post bonds. However, Jordan Cove's June 10, 2014 MOU with the ODE requires the posting of a bond to cover retirement costs. Also, both companies would have insurance to cover the unlikely event of an incident.
- IND175-9 As stated on pages 4-910 and 911, measures recommended in the noise study (Miki Corporation 2007a) would reduce temporary noise impacts at either location to acceptable levels.
- IND175-10 As stated on pages 4-910 and 911, measures recommended in the noise study (Miki Corporation 2007a) would reduce temporary noise impacts at either location to acceptable levels.
- IND175-11 See the requirements for using surface water for hydrostatic testing on pages 4-395 to 397 in section 4.4.4.2.2. These include obtaining permits from ODWR, which are subject to review by ODEQ and ODFW. ODWR would follow its own process for evaluating the permit application.
- IND175-12 See the requirements for using surface water for hydrostatic testing on pages 4-395 to 397 in section 4.4.4.2.2. These include obtaining permits from ODWR, which are subject to review by ODEQ and ODFW. ODWR would follow its own process for evaluating the project.

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Topic	DEIS Page	DEIS Text (if needed)	Requested Actions Including Comments/Questions	
Access to Rogue River for a Water Source (Hydrostatic, HDD, dust abatement) – MP 122.00 & 122.6	P-16	These TEWAs are required for the Rogue River (ASP326) HDD, pipe pull-back areas, and to access the river for a water source (Hydrostatic, HDD, dust abatement) and for potential frac out response.	Appendix P of the DEIS (Pacific Connector's Proposed Modifications to FERC's Plan and Procedures) includes 28 pages of site-specific variances to FERC's Wetland and Waterbody Procedures and Upland Plans. The variance at MP 122.00 & 122.6 talks about access to the river for a water source (Hydrostatic, HDD, dust abatement) and for potential frac out response. This is the only place in the DEIS where vehicle access to the Rogue River is mentioned (there is currently no road access to the river at the proposed crossing site). Road construction or equipment traffic to the edge of the Rogue River crossing site should not be allowed for any purpose. Water for dust abatement along Old Ferry Road (OFR) and the east side of the Rogue River should come from an existing access road along the Rogue River, presumably where OFR comes within a few feet of the river at flood rock. The Rogue River as a source of water for dust is not mentioned in the main body of the DEIS. Rogue River water for hydrostatic testing is addressed in the following comment.	IND175-13
Extensive Grading Improvement Near Rogue River Crossing	Appendix 2H attached to Resource Report 2		The GeoEngineers report included in Appendix 2H attached to Resource Report 2 (Rogue River HDD – Preliminary Feasibility Analysis, File 8169-021-00, Task 1200) states: "The HDD entry workspace may be accessed via a private drive off of Old Ferry Road and will likely require clearing and extensive grading improvements prior to construction". These "extensive grading improvements", which may have water quality environmental consequences due to their proximity to the Rogue River, should be detailed now in the EIS rather than waiting until construction begins, so they may be addressed in the 401/404 permitting process.	IND175-14
Construction Access Roads – Old Ferry Road	3-48 to 52	We do not recommend use of the new access road to the Rogue River HDD site.	The Old Ferry Road (OFR) Committee disagrees with your recommendation. The problems associated with the use of OFR are not adequately addressed in the DEIS. The thrust of the language in the DEIS is more about justification for the use of OFR rather than addressing the issues that would be created by its use. Of central concern are three issues:  1. The extent of OFR modifications to accommodate HDD drill rigs and associated equipment, trucks to remove drill tailings and vegetation/lumber from the ROW, trucks to haul pipe and pipe laying equipment. The DEIS (3-48) includes a statement that "the road would need to be approximately 16 feet wide while footnote b (3-50) states that "The existing road prism of OFR is estimated to be an average of approximately 12 feet in width". There is no explanation for this disparity which does not support the statement (3-51) that "improvement could be limited to several turn outs, curve widenings and one staging area". We believe that the actual road modification will be much greater than stated. Where OFR runs along the Rogue River at flood	IND175-15

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IND175-13 Vehicle access within the pipeline right-of-way is an inherent part of construction. See page 2-105 in chapter 2 which states "Part of the construction right-of-way would include a travel lane for construction equipment and related Project vehicles."

IND175-14 The comment refers to a private drive. Detailed plans would require surveys; very few private land owners have granted access to their property for Pacific Connector to complete these surveys.

IND175-15 We recognize that the Old Ferry Road Committee does not agree with the recommendation in chapter 3. Our reasons for the recommendation are discussed in section 3.4.2.9.

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February 3, 2015

		<p>rock, road modification to 16 feet would require widening within 10 feet of the river or rock removal and possible blasting on the up-hill side of the river.</p> <p>2. The volume of traffic on OFR by duration and type of vehicle to include HDD drilling related equipment and truckloads of drill tailings, clearing vegetation/lumber from the right-of-way, truckloads of pipe (including total length of pipe propose to be transported via OFR), pipe laying equipment and vehicles transporting workers. The DEIS does not address the length of the pipeline ROW that will be supported by OFR. The distance involved will have a huge impact on OFR traffic. Are several miles of pipe being transported to the pipeline ROW via OFR and are several miles of cleared trees and possibly other vegetation being transported to Hwy 62 via OFR? These questions are not answered in the DEIS and raise the concern that the volume and type of construction related traffic on OFR will be much greater than implied. We need answers to these questions.</p> <p>3. OFR road management during (and after) pipeline construction to include peak traffic hours (by type of vehicle), traffic management, gate management, watering schedule, repair of any road damage or drainage problems through the first winter/spring following completing of construction.</p> <p>Traffic volume along OFR would be significantly reduced if pipe for mileposts 123.1 to 124.9 were brought in via the Indian Creek Firebreak Road (BLM road 34-1-23). The OFR Committee strongly recommends bringing in pipe for this section via the Indian Creek Firebreak Road. Please address this point in the FEIS (it was not addressed in the DEIS despite this request in my scoping comments).</p> <p>Pacific Connector has stated that the OFR gate will be replaced with a construction gate during the construction window. Since the gate width of 14 feet is wider than many sections of OFR, we question the need to remove the existing gate during the construction period. Please address this concern in the FEIS.</p> <p>Page 3-51 of the DEIS states that "The largest TEWA within the VRM II area has also been located in an existing log landing area; therefore, these TEWAs are expected to be consistent with the BLM's VRM II visual quality objectives". We are not aware of any such existing log landing area and therefore fail to see any connection with BLM's VRM II visual quality objectives. VRM II visual quality objectives east of the Rogue River will be addressed separately under the heading of Visual Impact later in these comments.</p> <p>The most appropriate mitigation for OFR residents is to eliminate or minimize the use of OFR for this project.</p>	<p>IND175-15 continued</p> <p>IND175-16</p> <p>IND175-17</p> <p>IND175-18</p>
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**IND175-16** Pacific Connector stated in its April 27, 2015 filing that based on their understanding, the existing gate along OFR may be an electronic, keypad operated gate. The company would work with landowners to negotiate shared use of OFR and any necessary modifications to the gate to minimize impact to the road owners and accommodate construction traffic.

**IND175-17** The referenced text has been revised. BLM reviewed the visual impacts of the project in this vicinity and determined that the project does not meet VRM Class II objectives in the short-term (less than 5 years), but plan amendments are not needed because the area in question will be used for a very short term, and mitigation developed in the Aesthetics Management Plan will help the areas reach VRM Class II objectives in the long-term (5 to 10 years).

**IND175-18** Comment noted. Chapter 3 considers alternatives to the use of Old Ferry Road, and concludes that improvement and use of Old Ferry Road is the preferred alternative, provided that the road would remain open to residents throughout all phases of construction.

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Topic	DEIS Page	DEIS Text (if needed)	Requested Actions Including Comments/Questions	
Unanticipated Hazardous Waste Discovery Plan – Jordan Cove Site Contamination Issues	4-303		Barbara Gimlin's public comments, entered into the FERC public record on December 16, 2014 detail various soil contamination issues at the proposed terminal. Ms. Gimlin's precise and detailed comments about JCEP's failure to report contaminants, address relevant safety issues, conduct additional testing and follow the Unanticipated Hazardous Waste Discovery Plan raise serious questions about the safety of the project and the adequacy of plans for identifying and correcting contamination issues in accordance with State and Federal law. The attached letter to Dick Pedersen, Director Oregon Department of Environmental Quality (DEQ) from 17 Oregon conservation organizations, includes six requested action steps in response to Ms. Gimlin's serious allegations including independent testing for contaminants at appropriate locations with test results sent directly to DEQ. The Unanticipated Hazardous Waste Discovery Plan should be modified to require immediate contractor notification of any previously undiscovered soil contamination to both Jordan Cove's Environmental Inspector AND TO DEQ DIRECTLY.	IND175-19
Recommendations 14 through 28	5-29 to 5-31	Documents to be submitted prior to the end of the comment period on the DEIS	All submissions filed with the Secretary per recommendations 14 through 26 should be subject to a minimum of a 30 day public comment period with public comments taken into account before issuance of the Final EIS and any approval of the project by FERC.  Please note that the numbering of Recommendations is incorrect. There are two separate Recommendations listed for numbers 17, 18 and 19.	IND175-20 IND175-21
Recommendations 48 through 52	5-36	Documents to be submitted prior to the start of construction	All submissions filed with the Secretary per recommendations 48 through 52 should be subject to a minimum of a 30 day public comment period with public comments taken into account prior to the start of construction.	IND175-22
Visual Resources on BLM Lands – KOP-P2 Trail Post Office (Near MP 123.0)	4-760 to 4-761 and 4-776 to 4-782		This is essentially the view from the Crater Lake Highway (52). The simulated view of the near ridge line from the heavily traveled Highway 62 is dramatic and will not meet the Scenic Integrity Objective (appears unaltered) or the BLM Visual Resource Management Class II definition (The nature of this class is to retain the existing character of the landscape). The DEIS acknowledges (4-782) that "the pipeline does not meet VRM Class II objectives in the short term (less than 5 years)" at this location and notes that mitigation developed in the Aesthetics Management Plan would help the area reach VRM Class II objectives in the long term (5 to 10 years). The purpose of having a VRM and Scenery Integrity Objective is to retain visual impact. The Aesthetics Management Plan must specifically address the steps that will be taken to restore the view at this location in the short term.	IND175-23

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- IND175-19 Comment noted. The DEQ would be notified as appropriate following evaluation of the specific issue by the EI.
- IND175-20 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.
- IND175-21 This error has been corrected.
- IND175-22 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.
- IND175-23 The Aesthetics Management Plan specifically addresses the steps needed to meet the VRM class objectives at KOP-P2 within 5-10 years and acknowledges the objectives would not be met in less than five years (see section 4.8 of the DEIS and attachment 1 to the 2013 POD).



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Topic	DEIS Page	DEIS Text (if needed)	Requested Actions Including Comments/Questions	
Third-Party Environmental Monitors	2-119	Pacific Connector has agreed to fund third-party environmental monitors to the extent determined necessary by FERC staff and the federal land-managing agencies during project construction.	Comments filed with the FERC by Barbara Gimlin on December 16, 2014 provide compelling evidence that staff hired by Jordan Cove and Pacific Connector have a conflict of interest and may not report required environmentally sensitive information. FERC and the federal land management agencies should publicly identify the number of third-party environmental monitors hired, the areas for which they are responsible and contact information. The scope of the third-party monitors should include work performed on private property.  What specific process is available to a property owner along the pipeline right-of-way if there are concerns that quality assurance standards, compliance with mitigation measures and other applicable regulatory requirements are not being met or followed? If the Chief Inspector and the EI work for Pacific Connector, there must be a clear and timely process for taking concerns beyond Pacific Connector representatives if the Chief Inspector or other Pacific Connector representative does not resolve the concern.	IND175-24  IND175-25
Landowner Complaint Resolution Procedures			Will the public have the opportunity to review the Landowner Complaint Resolution Procedures prior to the issuance of the final EIS? What types of complaints are eligible for review? Do the procedures provide for appeal to a neutral third party if the Landowner is not in agreement with a decision by Pacific Connector? If there is a neutral third party reviewer, does this individual have the authority to award damages in applicable situations if the landowner prevails.	IND175-26
Construction Damages			Pacific Connector should be required to post a bond for damages resulting from construction of the pipeline including, but not limited to, contamination of wells, erosion, drainage or failure to restore areas disturbed during construction in accordance with the ECRP.	IND175-27
Easement Use			FERC should not allow the permanent easement to be used for any purpose other than the interstate transportation of natural gas.	IND175-28
Pipeline Alternatives	3-19		Pete Samarin, a lead Oregon Department of Fish and Wildlife (ODFW) biologist for the project reports that ODFW proposed crossing the Rogue River upstream of Lost Creek Lake to avoid wild salmon habitat and potential water quality issues in the Rogue basin. I cannot find any reference to such a proposal in either the import FEIS or the export DEIS. The FERC must evaluate the feasibility of this alternative in the EIS or identify where it was evaluated in the export DEIS. What was the name of the ODFW suggested route?	IND175-29

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- IND175-24 The scope of work for the third-party monitors is presented in section 2.5.1 of the DEIS. The scope does include work performed on private property.
- IND175-25 FERC hires a third party inspector to oversee constructions to insure they are meeting their design and permit requirements. The third-party environmental monitors would report directly to the FERC staff, the BLM designated official, or the land-managing agency with jurisdictional interest. In addition, Pacific Connector developed a landowner's complaint resolution procedure (filed as appendix 8B to Resource Report 8 in June 2013). If landowners are not satisfied their concerns are being addressed, they should call FERC's Dispute Resolution Division (DRD) toll free at 1-877-337-2237 or by email at [ferc.adr@ferc.gov](mailto:ferc.adr@ferc.gov). More information about the DRD is available on the FERC website: <http://www.ferc.gov/legal/adr/drd.asp>.
- IND175-26 The Landowner Complaint Resolution Procedure is typically prepared and submitted to FERC as part of the pre-construction Implementation Plan, which would be after the final EIS. The Implementation Plan would be filed as part of the project record and available for review by the public at that time. The procedures would be company and project-specific, and FERC is not aware at this time of the details that would be included in the plan.
- IND175-27 The FERC does not require that either Jordan Cove or Pacific Connector post bonds. However, Jordan Cove's June 10, 2014 MOU with the ODE requires the posting of a bond to cover retirement costs. Also, both companies would have insurance to cover the unlikely event of an incident.
- IND175-28 Comment noted.
- IND175-29 An EIS need not consider every possible alternative suggested. The DEIS evaluates crossing methods in section 4.4.2.2. The crossing plan is included in Appendix 2G to Resource Report 2 of Pacific Connector's June 6, 2013 application with the FERC. The entire application is available in electronic format for public viewing via the internet on the FERC webpage ([www.ferc.gov](http://www.ferc.gov)) through our eLibrary system. Also see the HDD Contingency Plan was attached as Appendix 2H to Resource Report 2. See the specific plane for crossing the Rogue River in that section. The state will consider the proposed crossing methods and location as part of their permit process.

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February 2, 2015

Dick Pedersen  
Director, Oregon Department of Environmental Quality (DEQ)  
811 SW 6<sup>th</sup> Avenue  
Portland, OR 97204-1390

RE: Requested Action in Response to Public Comments by Barbara Gimlin on Jordan Cove  
Energy Project

Dear Mr. Pedersen:

The attached formal public comments from Barbara Gimlin, entered into the Federal Energy Regulatory Commission (FERC) public record on December 16, 2014 and copied to you and several other DEQ staff members, detail various soil contamination issues at the proposed site for a liquefied natural gas (LNG) terminal for the Jordan Cove Energy Project (JCEP). Ms. Gimlin's concerns about JCEP site contaminants come from her firsthand experience working for JCEP while employed by SHN Consulting Engineers & Geologists in Coos Bay as a biologist and environmental compliance specialist from March 2013 to April 2014.

Ms. Gimlin's precise and detailed comments about JCEP's failure to report contaminants, address relevant safety issues, conduct additional testing and follow the Unanticipated Hazardous Waste Discovery Plan raise serious questions about the safety of the project and the adequacy of plans for identifying and correcting contamination issues in accordance with State and Federal law.

DEQ is responsible for protecting Oregon's water quality, cleaning up toxic spills and managing the proper disposal of hazardous and solid wastes. Pursuant to Resource Conservation and Recovery Act Section 3007 and Oregon's hazardous waste program, DEQ has the authority to enter, inspect, and take samples at the site. DEQ's hazardous waste program provides for site evaluation, notice of environmental hazard, and remedial action for contaminated sites. The existing site contamination, proposed construction and excavation activities, and demonstrated noncompliance with discovery and disclosure plans warrant detailed investigation. To protect the people of the State in this difficult and high-risk situation, we respectfully request that DEQ immediately take the following steps in response to these serious allegations:

- Meet with Ms. Gimlin on site to review her concerns in detail, and conduct a full and comprehensive field investigation in response to her concerns.
- Review all other materials and information submitted by JCEP and all its contractors in relationship to these issues. In particular, we are concerned that the further site disturbance resulting from construction and excavation activities may result in release of on-site contaminants to the waters of Coos Bay and nearby wetlands. DEQ should carefully examine these plans in coordination with review of existing contamination on the site.
- Issue a detailed, comprehensive public report of findings and action steps that must be completed prior to any proposal to issue a Water Quality Certification for the project, pursuant to your responsibilities under Section 401 of the Clean Water Act. The action steps must require additional testing for contaminants at appropriate locations identified by Ms. Gimlin with test results sent directly to DEQ.

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- Fully and comprehensively consider the risk of identified pollutants entering public waters, and report your findings to the public. This is mandatory for any Section 401 Water Quality Certification, as well as for 1200-C and 1200-Z NPDES permits for site construction and operation.
- Modify the JCEP Unanticipated Hazardous Waste Discovery Plan to require immediate contractor notification of any previously undiscovered soil contamination to both Jordan Cove's Environmental Inspector and to DEQ directly.
- Finally, ensure that all other relevant State and Federal agencies, including the Environmental Protection Agency and the Oregon Attorney General, are fully informed of the progress of your investigations and the status of your findings at every step along the way.

A full and comprehensive investigation will enhance public confidence in DEQ's mission to protect the public and Oregon's water quality from hazardous wastes, toxic spills and corporate misdeeds.

Please contact Courtney Johnson ([courtney@crag.org](mailto:courtney@crag.org), 503-525-2728) if you would like to discuss these concerns in more detail.

Sincerely,

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Nicholas Nelson, Portland, OR.  
The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND176

IND176-1

IND176-2

IND176-3

IND176-4

IND176-5

IND176-6

**IND176 Nicholas Nelson, Portland, OR**

IND176-1 See the Response to IND1-1.

IND176-2 See the response to IND1-3.

IND176-3 See the response to IND1-5.

IND176-4 See the response to IND1-7.

IND176-5 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.

IND176-6 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150204-5158 FERC PDF (Unofficial) 2/4/2015 4:54:31 PM

**IND177      John Knutson, Coos Bay, OR**

IND177

IND177-1      Comment noted.

john knutson, coos bay, OR.  
i am in favor of these projects,you should approve.I am a 64 year old  
resident of Coos Bay and operate a 100 year old family business here.  
these project are very important to the south coast area

IND177-1

20150204-0016 FERC PDF (Unofficial) 02/04/2015

IND178

IND178 Susan Applegate, Yoncalla, OR

IND178-1 See the response to IND1-3.

**Public Comment of the DRAFT EIS  
Jordan Cove Project and Terminal,  
(including) the Pacific Connector  
pipeline.**

Docket number for PCGP: CP13-492-  
000

Docket number for JCEP LNG: CP13-  
483-000

From: Susan Applegate  
4739 Elkhead Rd  
Yoncalla, OR 97499  
541-849-3500

Date: January 9, 2015

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FILED  
OFFICE  
OF THE  
COMMISSIONER  
ENERGY DIVISION

**PROLOGUE — PHILOSOPHICAL AND MORAL  
CONSIDERATIONS**

Whenever we participate in any part of a project such as the PCGP and the JCEP LNG, where not only site specific local impacts result from implementation, but where there are large-scale global impacts, we become participants in the entire process. FRACKING should be considered an environmental concern in the EIS. Veresen has said their "purpose and need" for building the pipeline and the Jordan Cove terminal, etc. is to increase fracking. FERC's decision that the impacts of fracking are not "environmental in nature" is deeply flawed. Methane gas is being leaked at insupportable levels at the drill sites. The fracking process results in massive water contamination rendering ground water, streams and wells poisonous and hazardous. Fracking has also been associated with the occurrence of earthquakes in those areas where fracking occurs. Global Climate Change or Global Warming results in a build up of carbon in our atmosphere. The fracking, liquifying of natural gas, the piping, its delivery and final use results in releases of GHG emissions unacceptable in our state of atmospheric imbalance. In allowing this project to go through, we are culpable and

IND178-1

20150204-0016 FERC PDF (Unofficial) 02/04/2015

IND178 Continued, page 2 of 6

IND178-2 See the response to IND1-2.

responsible for every aspect of this project's process, both locally and globally. It is my belief that FERC has a moral obligation to consider the environmental impacts of fracking and the environmental impacts of greenhouse gas emissions in this application and refuse these corporations' request for licensure.  
DEIS page 1- 2- Veresen's purpose and need analysis is in their Resource Report 1.

#### COMMENT

##### GREEN HOUSE GAS EMISSIONS CONCERNS:

As the Environmental Protection Agency, EPA, is required to monitor and implement strategies for reducing greenhouse gas (GHG) emissions as part of the Clean Air Act, (1973), as decided by the US Supreme Court, 2007, it is incumbent upon FERC to consider the GHG emissions in determining the efficacy of an LNG project. I would like to address these issues in connection with the proposed PCGP and JCEP LNG project, along with other deep environmental concerns that this project exemplifies.  
In 2009, the EPA released its scientific findings, concluding that global warming emissions presented a danger to public health (known as the "endangerment finding").

The climate impacts of natural gas production and transportation of liquefied natural gas (LNG), has been analyzed in major peer-reviewed studies over the last 3 years. The following two points are among some of the indisputable results:

1. Natural gas consumption, here and abroad, exacerbates GHG emissions and pollution.
2. Natural gas production and LNG exports offer no substantive reduction of carbon pollution over other fossil fuels.

Operating from the position that natural gas is a "bridge" energy fuel can no longer be claimed as viable.

Methane leakage and explosions have been proven pervasive in the supply chain. Although your draft EIS makes claims that the applicant has proven that the process is safe, it has not addressed (for the PCGP), the problem of leakage and detection. Since this project is in rural areas, the applicants consider the impacts on humans minimal and marginal. However, I disagree since the potential impacts are huge. Again, because of the rural nature of the landscape through which much of this pipeline travels, the PCGP project

1. will be using thinner metal in the pipe to be laid
2. plans to employ local workers who may not be adequately trained nor

IND178-2



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**IND178 Continued, page 3 of 6**

familiar with the exact nature of gas pipeline construction  
3. plans to bury the pipe at a mere three feet  
4. will be using non-odorous gaseous production methods rendering the detection of leaks difficult even with regular inspections, until livestock start dying off or until a spark meets the gas leak and an explosion results.

IND178-2  
continued

**Leakage** creates fugitive methane emissions throughout the gas supply chain: in drilling and production, transmission, processing and refining, and distribution, (including liquefaction into LNG), its transport, re-gasification and redistribution.

Every month there is a major fossil fuel spill, leak or explosion somewhere in the world.

Dr. Terry Isaacson, white paper on Human Effects on Planet Earth 2014

It appears in recent scientific studies that methane is more dangerous than carbon dioxide. While it is true that direct methane combustion, viewed in isolation of the remainder of the production/transportation process, releases less carbon dioxide than burning other fossil fuels, the production and transportation of the gas nullifies those margins. As well, FERC needs to quantify the effects of the GHG heat-trapping characteristics of Methane/natural gas from other fossil fuels emitting carbon dioxide. These are serious environmental concerns for me.

IND178-3

The Intergovernmental Panel on Climate Change (IPCC) assesses methane impact over a twenty-year period as having a global warming potential 86 times greater than carbon dioxide.  
Intergovernmental Panel on Climate Change 9(IPCC), Climate Change 2013: Physical Science Basis, Anthropogenic and Natural Radiative Forcing. P. 714)

It is a responsibility of FERC to update its review process to include the latest science. When we look at the normal leakage of even the most tightly run operation, it is an unacceptable percentage. From the well, to the pipeline, at the refineries and liquefaction process, and in the consumer distribution system, the impact of even 1.5 % to 3%, it is huge because of the devastating nature of methane compared to other GHGases.  
(IPCC Climate Change 2013: Physical Science Basis, Summary or Policymakers, PP. 27-29.

IND178-4

July 29, 2014, a panel of leading scientists called on the Obama Administration to give an accurate accounting for the contribution of methane emissions to potential global warming.  
Chapin, Davidson, Hong, Howarth, et al...Letter to the US EPA, U.S. DOE, CEQ, White House Domestic Policy Council, July 29, 2014

IND178-5

I have not been convinced that FERC has thoroughly incorporated this

IND178-3 See the response to IND1-1.

IND178-4 See the response to IND1-2.

IND178-5 See the response to IND1-1 and IND1-2.

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quantifying process in consideration of a license for the PCGP and JCEP LING project.

IND178-5  
continued

#### CASCADIA SUBDUCTION ZONE EARTHQUAKE

Claiming that there is nothing to worry about with an earthquake hitting the coastline or into the Cascades is absolutely arrogant. Geologists are telling us that it is not a matter of "if" but a matter of "When". A LNG pipeline would exacerbate any problems occurring from an earthquake by 100 fold. With waves easily estimated at 43 feet, the Jordan Cove facility would be damaged and an explosion would rip through the communities of local residents. Coupled with the ravaging damages from the tsunami and earthquake, the environmental effect would be catastrophic.

IND178-6

#### BENEFITS

Questions of costs and benefits for this project, is of major concern to those of us upon whose land the pipeline is trespassing. The momentary presence of jobs has become the political fodder for elected officials' acquiescence for the project. However, the benefits do not extend beyond the proclaimed two or three thousand workers involved in laying the construction of the project. Maintenance of the structures is estimated to employ only a few individuals. Pipe malfunctions, explosions, ruptures or leaks would of course, necessitate the employment of special workers for repair as well as hospital workers, emergency teams and environmental clean-up workers. I would rather see us spend taxpayer money to produce jobs that prepare us to respond to disasters and the increasing dangers spawned from global warming. We need an infrastructure that offers protection from violent storms, loss of coastline, drought relief for food producers, more fire stations and refuge centers with adequately trained personnel. The measly 100 or so workers for the proposed LNG and Jordan Cove projects do not warrant a great enough benefit to our communities to offset the environmental damage, immediate, long-term and potential risks to life and limb.

#### ENVIRONMENTAL CONCERNS

The costs to our immediate environment of this proposed project include displacement and termination of several endangered species' nesting sites including the Northern Spotted Owl and Marbled Murrelet. Red Tree Vole and the Northern Flying Squirrel. Other sensitive species include the Tailed Frog and the Pacific Fisher, (now being considered for ESA listing). The reclassification of forestland by BLM and the USFS managers replaces some of the best old growth habitat with less desirable areas as mitigating measures (from Matrix to LSRs). The fact that under current BLM and USFS management plans this project would not receive right of way approval and allow the disruptive and destructive impacts of the pipeline placement,

IND178-7

#### IND178 Continued, page 4 of 6

IND178-6 The EIS does not claim that there is "nothing to worry about". The safe operation of the LNG storage tanks is addressed in section 4.13 of the DEIS. As stated in section 4.2.1.3 of the DEIS, Jordan Cove would design and construct its facilities in a manner that takes geological conditions, such as an earthquake, into consideration.

IND178-7 The DEIS discloses that for every acre of LSOG that would be lost in the LSR, 10 acres of LSOG habitat would be added to the LSR network (see DEIS pages 4-225 to 4-235). The purpose of the proposed reallocation of matrix lands to Late Successional Reserves (LSR) is to maintain or increase the amount of late-successional/old growth (LSOG) forest within the LSR system (see DEIS sec. 4.1.3.6). The DEIS recognizes that LSOG forest would be lost and the construction of the pipeline would result in long-term (permanent) adverse impacts to wildlife species dependent on LSOG forest (see DEIS sec. 4.5, 4.6, 4.7). The reallocation of matrix lands to LSR will result in a change in management direction at a landscape level. Both BLM and FS planning process provide for amendments to LMPS that are often used to address circumstances unforeseen at the time the plans were developed and approved. Under the federal Energy Policy Act, the BLM is required to consider an application for a right-of-way grant to use or occupy federal lands, and the FS is required to consider its concurrence, should a right-of-way grant be issued. Furthermore, both BLM and FS are required to consider land management plan amendments necessary to continue to meet the land management objectives, if a right-of-way grant were issued. The reallocation of matrix lands to LSR is intended to ensure that the LMPs "remain whole", and over time the agencies are able to meet the wide array of commitments these plans make.

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**IND178 Continued, page 5 of 6**

indicates to me that the project should indeed not be granted approval. The need to re-allocate lands for management as part of the mitigation, is mitigation in name only and not an actual improvement to the landscape or habitat in any respect.

IND178-7  
continued

The fisheries so important to the complex web of life and to the economy in the Pacific NW cannot be easily mitigated in part because all of our fisheries are suffering or recovering from industrial assaults over a 100-year period of road-building, logging, grazing and mining. The low numbers of salmonids is the testimonial to that condition. The materials used in laying the pipe such as diesel fuel, gasoline, engine oil transmission drive, train oil, hydraulic oil and gear oil, — all have been known to kill fish when escaping into the waterway. The blasting of bedrock takes an enormous amount of time to repair and many of these rivers and streams cannot afford that disruption, particularly as the effects of global warming are already being experienced in increased extreme flooding events following extreme drought times.

**Natural Gas Industry**

The Natural Gas Industry,— from fracking to pumping to transportation to liquification, — is the least regulated of the fossil fuel industries, which is perhaps why during the ground prep at the Jordan Cove site, Veresen officials did not notify the DEQ or the EPA of the contaminated soils they discovered at the site. Without permits they said they removed the contaminated soils and have placed them in a pile. This was reported in our newspapers recently. The CEO had a flip comment about it not being a big deal when one of the scientists in the employ of Veresen noticed this was not properly and legally reported to the appropriate agencies. I take this as a serious warning that it would be just the first of many many cost cutting and hidden actions that would compromise the safety of the project.

The Jordan Cove Terminal to be constructed on the North Spit at Coos Bay, will be emitting 2.166 million tons of global warming CO2e per year. (DEQ Air Quality Permit Application)

That is more than half of what Oregon's solitary coal plant in Boardman emits! We will be more than doubling our contribution to carbon in the atmosphere in order for a Canadian corporation to continue to frack, without any long-term benefits for us but with enormous long-term disastrous effects to us locally and globally. One of those disasters, beyond the pouring of CO2 into the atmosphere, is the explosion and loss of life that will occur on the day the tsunami hits our Pacific coastline.

I can find no discernable benefit to me or to my fellow Oregonians from this assault on our lands and waters.

IND178-8

**EMINENT DOMAIN**

Property taken by the government, corporation housed in the USA, or by a foreign corporation, as is the case here, for use on a project that has minimum

IND178-9

20150204-0016 FERC PDF (Unofficial) 02/04/2015

IND178 Continued, page 6 of 6

to no benefit for the people of the state or region, is unacceptable and should be illegal.

IND178-9  
continued

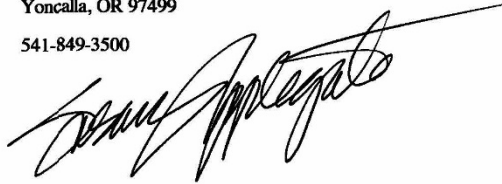
**Prior** to the recent Supreme Court ruling allowing corporations to take private property for private benefit under the claim that it is serving the public, people (citizens) may have felt put out, but did not object when they saw a clear public benefit. This project does not exemplify that situation. There is no direct or indirect benefit to the public for this project, either in long-term jobs, stable environment, freedom from worry, or lower cost natural gas supply. The value exchange for the property is not adequate to the loss sustained to the property by the presence of the pipeline. The property values plunge when there is a known LNG pipeline traversing it. Property owners are being asked to sacrifice — not for their community or their country, but for the private benefit of a corporation. There is nothing noble or wise, conservative or judicious to this proposed project.

IND178-10

**I urge you to deny all permits or certifications for the proposed Jordan Cove LNG export project and associated 230-mile pipeline (NWP-2012-441).**

Susan Applegate  
4739 Elkhead Rd  
Yoncalla, OR 97499

541-849-3500



IND178-10 Comment noted.

20150204-5152 FERC PDF (Unofficial) 2/4/2015 4:38:36 PM

IND179

**IND179 Ron Kutch, Lakeside, OR**

IND179-1 Comment noted.

IND179-2 Comment noted.

IND179-3 Comment noted.

Ron Kutch, Lakeside, OR.  
Secretary Kimberly Bose and Deputy Secretary Nathaniel Davis, Sr:  
I am writing today in favor of the Jordan Cove Energy Project in North  
Bend, OR.

I believe careful research has been done, and that as long as prudent  
measures are taken during the construction and operation of the LNG  
plant, our community will be safe from the hazards feared by a vocal  
minority. We all need to be good stewards of our environment, and I  
believe adequate measures are being developed which will prevent  
catastrophic damage as well as smaller environmental issues. The days of  
Slash and Burn are over. Any entity operating in the area now knows that  
they need to address environmental concerns as a part of their overall  
plan.

IND179-1

Unfortunately, the vocal minority make a lot of noise that is not  
reflective of the population as a whole. Too often, they bully their way  
through and are able to make a big enough stink that prospective  
developers give up and move elsewhere. They seem to think that making  
enough noise will change the laws. Unfortunately, they have succeeded too  
often in the past.

Jordan Cove Energy has not allowed the vocal minority to deter them in  
seeking to bring the LNG plant to the area. We have a terrific port here  
that is vastly underutilized because of those who don't want progress.  
The plant will bring sorely needed jobs back to the area. Other  
industries will move here to support the plant - industries that will buy  
supplies and pay taxes, then hire people who buy supplies and pay taxes.

IND179-2

I have lived in the area for 30 years, and have seen this happen time and  
time again. The people who need jobs move on, and the people who don't  
work stick around. As a result, we have among the highest unemployment  
and poverty in the nation. Along with the poverty comes a multitude of  
social problems that will not be solved until we are able to offer decent  
paying jobs for the local residents. My grown children have had to leave  
the area to find work, raising my grandkids elsewhere. If you have  
grandkids, you know what that means - Grandma has to spoil them long  
distance!

I believe the Draft Environmental Impact Study was well researched and  
well written. I urge you to continue doing research, address the  
concerns, require Jordan Cove Energy to take care of the environment,  
then move on.  
Thank you for allowing these comments and for your time.

IND179-3

Respectfully,

Ron Kutch  
Lakeside, OR

20150204-5159 FERC PDF (Unofficial) 2/4/2015 4:55:52 PM

IND180

**IND180 Ron Kutch, Lakeside, OR**

IND180-1 Comment noted.

IND180-2 Comment noted.

Ron Kutch, Lakeside, OR.

Secretary Kimberly Bose and Deputy Secretary Nathaniel Davis, Sr:  
I am writing today in favor of the Jordan Cove Energy Project and  
associated Pacific Connector Gas Pipeline in North Bend, OR.

I believe careful research has been done, and that as long as prudent  
measures are taken during the construction and operation of the LNG plant  
and pipeline, our community will be safe from the hazards feared by a  
vocal minority. We all need to be good stewards of our environment, and I  
believe adequate measures are being developed which will prevent  
catastrophic damage as well as smaller environmental issues. The days of  
Slash and Burn are over. Any entity operating in the area now knows that  
they need to address environmental concerns as a part of their overall  
plan.

IND180-1

Unfortunately, the vocal minority make a lot of noise that is not  
reflective of the population as a whole. Too often, they bully their way  
through and are able to make a big enough stink that prospective  
developers give up and move elsewhere. They seem to think that making  
enough noise will change the laws. Unfortunately, they have succeeded too  
often in the past.

Jordan Cove Energy has not allowed the vocal minority to deter them in  
seeking to bring the LNG plant to the area. We have a terrific port here  
that is vastly underutilized because of those who don't want progress.  
The plant will bring sorely needed jobs back to the area. Other  
industries will move here to support the plant - industries that will buy  
supplies and pay taxes, then hire people who buy supplies and pay taxes.

I have lived in the area for 30 years, and have seen this happen time and  
time again. The people who need jobs move on, and the people who don't  
work stick around. As a result, we have among the highest unemployment  
and poverty in the nation. Along with the poverty comes a multitude of  
social problems that will not be solved until we are able to offer decent  
paying jobs for the local residents. My grown children have had to leave  
the area to find work, raising my grandkids elsewhere. If you have  
grandkids, you know what that means - Grandma has to spoil them long  
distance!

I believe the Draft Environmental Impact Study was well researched and  
well written. It appears that there are many concerns with the pipeline  
route through Stock Slough rather than the Blue Ridge route. It seems  
that routing the pipeline along Blue Ridge would diminish the concerns of  
several residents along Stock Slough. I urge you to continue doing  
research, address the concerns, require Jordan Cove Energy to take care  
of the environment, then move on.

IND180-2

Thank you for allowing these comments and for your time.

Respectfully,

Ron Kutch

Lakeside, OR

20150205-5000 FERC PDF (Unofficial) 2/4/2015 5:02:12 PM

IND181

Kevin Carr, Grants Pass, OR.

I am vehemently Opposed to the Jordan Cove LNG Terminal and Pipeline Project for many reasons, including the fact that the environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

IND181-1

And do not forget that a percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

IND181-2

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

IND181-3

Given that geologists are increasingly concerned about a potential disastrous and imminent earthquake, FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

IND181-4

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

IND181-5

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

IND181-6

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider

IND181-7

## IND181 Kevin Carr, Grants Pass, OR

IND181-1 See the response to IND1-1.

IND181-2 See the response to IND1-2.

IND181-3 See the response to IND1-3.

IND181-4 See the response to IND1-4.

IND181-5 See the response to IND1-5.

IND181-6 See the response to IND1-7.

IND181-7 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.

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**IND181      Continued, page 2 of 2**

the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon. | IND181-7  
cont.

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. | IND181-8  
This project is too big to give so little time for public input.

IND181-8      The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.



20150205-5001 FERC PDF (Unofficial) 2/4/2015 5:56:21 PM

IND182

Barbara Butler, Coos Bay, OR.  
I have concerns with the Draft EIS for Jordan Cove:

- (1) There are several separate projects here that each warrant its own EIS. Lumping a 23-mile gas pipeline, the LNG plant and the 400 megawatt power plant (to name just three) into one document is not adequate. Each require their own individual treatment.
- (2) The impact on the LNG terminal and its operation on the North Bend airport traffic has not been addressed at all.
- (3) The report does not adequately address that this proposed LNG terminal is in the Cascadia Subduction Zone which is subject to earthquakes in the magnitude of 9.0 on the Richter scale.
- (4) The 23-mile pipeline will cross over 300 streams which provide spawning habitat to salmon, an endangered species, and this has not been adequately addressed.
- (5) 14 alternative ports were considered, but no mention of them occurs in this report. An analysis of all alternative ports needs to be made rather than just choosing North Bend.
- (6) The EIS does not adequately address that the natural gas supplied to this terminal will be acquired by drilling and fracking. An address of these activities on the environment must also be undertaken.
- (7) The 7.3 mile waterway needed for LNG tankers was not addressed in the draft EIS.
- (8) The creation of a berth and the subsequent fill were not addressed in the draft EIS.

IND182-1

IND182-2

IND182-3

IND182-4

IND182-5

IND182-6

IND182-7

IND182-8

## IND182 Barbara Butler, Coos Bay, OR

- IND182-1 These are connected actions under NEPA; therefore, they are considered together in one EIS, as required.
- IND182-2 Our analysis of potential Project-related impacts on the Southwest Oregon Regional Airport in North Bend can be found in section 4.10.1.4 of the DEIS. In their December 17, 2009 Order Granting Authorizations under Section 3 of the Natural Gas Act and Issuing Certificates for the original Jordan Cove LNG import proposal in Docket No. CP07-444-000, the other four sitting Commissioners disagreed with and overruled Mr. Wellinghoff's dissent. In a letter to the Commission dated December 22, 2014, commenting on our November 2014 DEIS for this Project, the Southwest Oregon Regional Airport and Coos County Airport District stated that it "strongly concurs with (the) recommendation (in the DEIS for Jordan Cove to document consultations with the Federal Aviation Administration [FAA] and submit the results of studies before Project construction) and believes that the FAA process will assure that the Airport continues to operate safely and efficiently."
- IND182-3 See the response to IND1-4 and IND73-16.
- IND182-4 Effects on streams are addressed in section 4.6.2.3.
- IND182-5 Jordan Cove's analysis of various ports that it examined along the Pacific Coast of the United States can be found in section 10.3.4 of Resource Report 10, included with its May 21, 2013 application to the FERC. Jordan Cove's application in Docket No. CP13-483-000 is a public document that can be viewed in electronic format on the internet through the eLibrary system of the FERC's webpage ([www.ferc.gov](http://www.ferc.gov)). As stated in section 3.3.1 of the DEIS, our detailed analysis of potential West Coast alternative ports was included in section 3.3 of our May 2009 FEIS for the original Jordan Cove LNG import proposal in Docket CP07-444-000. This document is also available for public viewing through the FERC webpage.
- IND182-6 See the response to IND1-3.
- IND182-7 See section 2.1.1.2; the waters of Coos Bay are managed by ODSL. Information on the access channel is provided in section 2.1.1.2; information on dredging and disposal of dredged material is provided in 2.1.1.12 and in 4.4.2.1. The existing navigation channel is maintained by the federal government. As stated in section 4.4.2.1, the existing channel would be used as part of the waterway for the Project; it can accommodate tankers up to 148,000 cubic meters in capacity. A new dredged channel would be created between the existing channel and the terminal marine slip. As discussed in section 2.2.1, the Coast Guard would limit the size of tankers using the waterway to 148,000 cubic meters in capacity. Jordan Cove estimates that about 90 tankers would visit its terminal. Maintenance dredging would continue to be required for the waterway.
- IND182-8 The Port has already obtained an easement for operation and maintenance of the access channel and the in-water portion of the slip. Environmental effects associated with excavation are addressed in sections 4.4.1.1.

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IND183

Leslie Burpo, Eugene, OR.

I am concerned about several aspects of this massive fossil fuel project:

1. It would be irresponsible to build a LNG terminal in this earthquake subduction zone, knowing as we do the high probability of an 8.7 to 9.1 quake in this specific zone. As Cascade Wildlands explained, "FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?"

IND183-1

2. I am against the facilitation of increased fracking that this project will allow. I believe fracking has many cumulative negative impacts on the environment, and yet the company's stated Purpose and Need for this project is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment. We don't want it here.

IND183-2

3. Oregonians will not accept a for-profit company telling them they must fork-over their private land so that the company can increase profits. I've learned that over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal, and that Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land!

IND183-3

4. And along that same vein of thought, it is unacceptable that FERC did not consider the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen must think it's OK to take a chance on blowing up a few rural Oregonians to increase profits. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. I don't think that type of reasoning is going to go over well with Oregonians. As Cascade says, "FERC should have considered if people lives are an acceptable trade for saving corporate profits."

IND183-4

5. And I've read that this project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife, and that over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon. This project trashes our environment in a big way in favor of the private profits of a few.

IND183-5

6. Climate Impacts: I've learned that The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove

IND183-6

## IND183 Leslie Burpo, Eugene, OR

IND183-1 See the response to IND1-4 and IND73-16.

IND183-2 See the response to IND1-3.

IND183-3 See the response to IND1-5.

IND183-4 See the response to IND1-7.

IND183-5 Effects on endangered, threatened, and special status wildlife are addressed in section 4.7.

IND183-6 See the response to IND1-1.

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**IND183      Continued, page 2 of 2**

terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

Natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

7. Finally, FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND183-6  
cont.

IND183-7

IND183-7      The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

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IND184

**IND184 Multiple Comment Letters submitted to Paul Friedman at  
Public Scoping Meeting**

MEMORANDUM TO: Office of the Secretary  
FROM: Paul Friedman, FERC staff  
SUBJECT: Jordan Cove Liquefaction Project  
CP13-483  
Pacific Connector Pipeline Project  
CP13-492  
DATE: January 2, 2015

Please place the attached documents in the public files for the projects proposed by Jordan Cove Energy Project LP (Jordan Cove) in Docket No. CP13-483-000 and by Pacific Connector Gas Pipeline LP (Pacific Connector) in Docket No. CP13-492-000:

- Copies of comments from the public meeting held at Southwest Oregon Community College in Coos Bay, OR on December 8, 2014.

The comments were provided to FERC staff. The documents are NOT confidential.

2015 JAN -5  
2015 JAN -5 PM 9:48  
Federal Energy  
Regulatory Commission

Public File PDF (Unofficial) 01/02/2015

Open letter to FERC - Dec 8th 2014 6pm SECC  
entitled: Who's IN CHARGE?

I have a quote from FDR in the 1940's, he said, "The liberty of a democracy is not safe if the people tolerate the growth of private power to a point where it becomes stronger than the democratic state itself. That is fascism, ownership of govt. by an individual, group or a controlling private power."

I welcome you today, representatives of the US govt, the FERC and afford us this opportunity to speak.

I understand FERC has no jurisdiction or responsibility regarding the possibility of explosion on our local waterways and that some unknown, yet to be announced 3rd party ~~business~~ will be involved. I further understand that Jordan Cove relinquishes any and all responsibility for any catastrophe be it on the waterway or the land in the event of some terrorist attack, tsunami, earthquake or the like. In other words, no one is taking responsibility for this project in its entirety and this being the very 1st of its kind to be operational on a US coastline, and I am not even allowed to drive without car insurance. What does NOT say? (Not the Oregon Office Admin/Trade)

IND184-1

There are about 110 documented shipwrecks right off Coos Bay waterways in the last 150 years, the latest being the New Carissa, of course. I believe Sir Francis Drake turned around here citing too dangerous to continue on his search for the Northwest Passage in the 1500's. Anyone who knows the southern Oregon coastline can tell you it is one of the most dangerous in the world.

The IC project plans to release at least 2.2 million tons of additional carbon (CO2's) per year here in Coos Bay and into our atmosphere. It supports chemical fracking and contamination of water sheds elsewhere in the US. Our ecosystem cannot possibly

IND184-2

## IND184 Barb S, Coos Bay, OR

- IND184-1 FERC is responsible for approving or not approving the LNG facility. The Coast Guard is responsible for LNG ships using the channel. Several state and federal agencies have responsibility for the many permits and regulations needed before the LNG terminal built. The risks of catastrophic events are discussed in section 4.13.
- IND184-2 See the response to IND1-1.

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2  
absorb further damage without increased climate induced catastrophic events. We have already lost 50% of our ocean life in the last 50 years and these carbon levels are higher on the planet than ever before in human existence. Our life sustaining systems are critically threatened by continued greed, exploitation, overuse and waste of our natural resources.

May I remind us, and with all due respect, this project which our govt, FERC representatives immediately accepts is in violation of 1) Constitution of the US and under the Bill of Rights guaranteeing and ensuring American citizens domestic tranquility, freedom from tyranny, and promotes the general welfare, 2) it is a violation of the Clean Air Act due to its operational and polluting nature, 3) it is a violation of the Clean Water Act due to released toxins and contaminants in unmanageable and impossible amounts, 4) it is a violation of the Endangered Species Act, risking the health of our Coastal Salmon population and other unnamed harmed animals. 5) it is a violation of our civil and community rights to not be polluted or engage in such actions against our will and 6) it is a basic human rights violation, not to mention the legality due to bribery, extortion and the misuse of power.

Join thousands of US citizens in filing lawsuits against each and every one of these violations and those who favor corporate profits over the general welfare of the public and guaranteed us those rights under our American Constitution.

Finally, if FERC truly holds decision making authority, let us be a leader with new clean energy technology with a denial of continued fossil fuel pollution & the ENE application. Let us instead support and approve as the Rockefellers have just done by divesting from gas/oil industry and redirecting \$50 billion into Wind/Solar/Biomass technology industry thus providing clean American jobs here at home & creating a better world for us all.

Thank you DARRYL STANLEY, Hillary, Coos Bay  
541-269-2147

IND184 Continued, page 3 of 22

- IND184-3 The Project would only be approved if it meets all laws and regulations, including the Clean Air Act, the Clean Water Act, and the Endangered Species Act.
- IND184-4 Comment noted.

IND184-3

IND184-4

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Michael Krumper  
2121 McPherson Ave.  
North Bend, Or. 97459  
[mkrumper@earthlink.net](mailto:mkrumper@earthlink.net)

Federal Energy Regulatory Commission  
Below are my comments (in teal) of quoted portions (in black) of Jordan Cove Energy and Pacific Connector Gas Pipeline Project Draft Environmental Impact Statement (Nov., 2014)

**Socioeconomics and Transportation** (p. ES-11 (p. 51 of .pdf))

Amazingly this section fails to address transportation issues at the near-by South West Oregon Regional Airport. The Terminal lies under or adjacent to 2 air corridors used by aircraft when landing or taking-off from the airport's two runways.

IND184-5

Emissions from the Terminal of fire, LNG, or explosive gases would clearly impact aircraft on final approach to land, or in their critical phase of take-off, just after leaving the runway!

Secondly the Terminal itself is at risk from aircraft crashing into it, while attempting to land in low visibility and/or windy conditions. Third the Terminal is at risk from aircraft having mechanical failure just after take-off. Fourth not only is the Terminal at risk from aircraft accidentally crashing into it, but there is also a potential risk from aircraft loaded with explosives intentionally crashing into it, in the context of a terrorist attack!

IND184-6

None of this is addressed in the Draft EIS, and appears to be a major flaw.

**4.12.1.1 Jordan Cove LNG Terminal**

**Chemical Accident Prevention Provisions** (p. 4-880) p. 1198 of the .pdf): LNG facilities are subject to safety regulations developed by the DOT (49 CFR 193) and the U.S. Department of Homeland Security (33 CFR 127). The EPA's Chemical Accident Prevention Provisions (40 CFR 68, which were developed in accordance with Section 112(r) of the CAA and referenced by Oregon regulations at OAR 340-244-0230) can also apply to owners or operators of stationary sources producing, processing, handling, or storing toxic or flammable substances; however, EPA's General Counsel has clarified that Section 112(r) and the associated regulations do not apply to LNG stored at terminals because the material is either being transported or stored incident to transportation (EPA 2006b).

Aside from LNG, which would be stored incident to transportation, the Project would not be storing hazardous or flammable substances in excess of any thresholds identified in 40 CFR 68, and therefore, those regulations do not apply. However, with regard to the storage of any small quantities of hazardous substances that are not being transported or stored incident to transportation, the 112(r)(1) general duty clause does apply:

Amounts of LNG held in storage need to be tightly regulated and monitored. "Incident to transportation" needs to be specifically defined along with appropriate consequences provided for excessive storage of LNG amounts and for excessive storage duration.

**IND184 Michael Krumper, North Bend, OR**

IND184-5 Section 4.10 1.4 in the Transportation section of the DEIS discusses the Project's effects on the airport, including LNG ship traffic. See the FERC Recommendation in that section requiring the applicant to consult with the FAA and document the results of studies required by the FAA.

IND184-6 As stated in section 4.10.1.4, the LNG storage tanks would be 1.4 miles from the end of the closest runway. DOT regulations require a distance of 1 mile.

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The price to be paid for exported LNG will be a highly variable. China has recently made an agreement with Russia for significant LNG importation. LNG resources are being developed in North Africa and Southern Asia. Proposed increased use of LNG within the US for transportation, and possible increased regulation of the fracking drilling process will all influence both the price paid for exported LNG and interest in exporting it.

Therefore it is likely that increasing the capacity for storage of LNG and natural gas will be needed, and storage at Jordan Cove beyond "incident to transportation" standard is probable in future.

**Operational Air Impacts and Mitigation (p 4-884 (p 1202 of the .pdf))**

In its estimate of pollutant emissions Table 4.12.1.1-6 does not include rate of pollution emission. The rate of emission may be higher if the LNG pressure in the storage facility is high due to large storage volume. Storage durations longer than "incident to transportation" may weaken the storage structure and increase the rate of pollution emission. Either or both of these factors could lead to exceeding the AAQS.

A complete analysis would make some attempt to define a pollutant emission rate, and consider these two factors.

IND184-7

IND184-8

**IND184 Continued, page 5 of 22**

IND184-7 If Jordan Cove wanted to increase storage capacity it would need to apply to FERC. The application would need a new NEPA review.

IND184-8 Table 4.12.1.1-6 presents the expected rates per hour.



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Statement to FERC 12/8/14 - richard knablin 555 Delaware St. North Bend, OR 97459

DOCKET NUMBERS CP13-483-000 AND CP13-492-000

Thank you for the opportunity to comment.

I ask for an extension of comment time as this DEIS is far too complex to examine in the time allotted.

1. - This DEIS also appears to be incomplete. There are so many "will be done's & "should be done's throughout that it seems little has been firmly established. The pipeline route itself is not established; the FAA has not given its approval; the Army Corp of Engineers needs to weigh in, and there are many state agencies who must be heard before this report is complete. More reasons to extend the time limit for public consideration of a truer look at this project.

2. - Apparently the purpose and need for this project was defined by Jordan Cove and accepted by the FERC. That purpose appears to be corporate profits, as there is no benefit to anyone else from this project. 30 to 50 permanent jobs is not enough justification for the enormous negative impact permanently impressed on southern Oregon.

3. - According to Jordan Cove's application, the Project is a market-driven response to the increasing availability of competitively priced natural gas from western Canadian and Rocky Mountain sources, and robust international demand for natural gas. Then goes on to admit there are no firm buyers, no market as yet for this gas. There was supposed to be "pipeline precedent agreements" executed by October 2014, but I have not seen them as yet.

4. - New reports show that by 2020, Jordan Cove will be the largest emitter of air pollution in the state of Oregon. Natural gas is mostly methane, a harmful gas that will be released inevitably as it moves through the J.C. pipes and processes. And of course, the project is upwind from the largest concentration of human habitation on the Oregon Coast.

5. - Sea Level Rise

An April 2, 2014 communication relayed that:

"Given the uncertainties in predictions of sea level change along the Oregon Coast and negative trends of these changes along some areas of the coast (mainly due to the tectonic rise), it is recommended not to include sea level rise factor into the tsunami modeling procedure."

This attitude seems to represent the bottom line for Veresen; dismiss the unknown variables.

6. - A reputable EIS requires a baseline study of all affected lands and waters. Such a study has not been done on the Coos Bay, but what is known is that pollutants such as BPAs, tributyltin, PCBs etc. do exist in the bay mud. A warning for any dredging that might take place to widen and deepen the shipping channel.

7. Finally, I would like to plead with the agency to not turn Coos County into the latest energy Sacrifice Zone for the sake of corporate profits. Just say NO to Jordan Cove

IND184-9

IND184-10

IND184-11

IND184-12

IND184-13

## IND184 Richard Knablin, North Bend, OR

IND184-9 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

IND184-10 This is a draft, additional studies and data will be included in the final EIS. One purpose of a DEIS is to identify additional information needed, often due to public or agency comments on the DEIS.

IND184-11 Comment noted.

IND184-12 The FERC environmental staff does not attempt to determine the economic viability of a project. The Commission will do this as part of their decision process. The EIS is intended to inform the Commission of the environmental effects of the Project.

IND184-13 Resource Report 2 filed with FERC on February 6, 2013 and available on eLibrary, describes the water quality and dredge material studies. The appendices to this report present the sampling details and results.

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**IND184 Martha Clemons, Corvallis, OR**

IND184-14 See the response to IND1-3.

**Testimony to FERC; public comment meeting, Coos Bay, Oregon,  
December 8, 2014 - Martha Clemons**

I feel compelled to speak out tonight that FERC must reject any and all permits for the proposed Jordan Cove Energy Project LNG terminal and connecting pipelines. There are many reasons why this project is a bad idea. I'll speak about one; the greenhouse gas, CO<sub>2</sub>.

The presence of CO<sub>2</sub> in the atmosphere at such high levels as we have now (400ppm) warms the planet and destabilizes the climate. The debate is over about that! Research continues to support that global warming is a direct result of the build-up of carbon emissions in the atmosphere. This global warming results in such problems as severe and dangerous super storms, melting of the Greenland ice sheet, release of methane from melting permafrost, warming oceans, sea level rise and extinction of species. Although your EIS addresses the CO<sub>2</sub> emissions from the generating plant that will power the LNG terminal, it does not take into account the greenhouse gas (GHG) impacts from the additional fracking that will be incurred or the burning of exported US gas in foreign markets. **These impacts cannot be reduced to less-than-significant levels.**

IND184-14

The notion that natural gas is a "clean" alternative fuel is false. To extract gas by fracking (an environmentally destructive process in itself), transport it in pressurized pipelines that can leak and start forest fires, use tremendous amounts of energy to convert it to LNG and ship it overseas for burning there is unconscionable in the present state of the world. Ultimately this process will release millions of tons of new CO<sub>2</sub> and will contribute to an unstable and potentially unlivable climate. And what for? Enormous profits for a few while the systems that sustain life on Earth as we know it will be irretrievably damaged? That is not possible to accept! It is morally wrong to leave a ransacked planet for our children and grandchildren.

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**IND184**      **Continued, page 8 of 22**

The fifth report from the Intergovernmental Panel on Climate Change states that there needs to be a huge shift away from carbon-intensive energy sources if we are to head off the worst effects of global warming. We must begin a rapid transition away from all fossil fuels, including natural gas, and keep the rest of that resource in reserve for future generations. You, the Federal Energy Regulatory Commission, have the obligation to regulate to that end and you must start now by denying all permits to build LNG terminals and connecting pipelines. And to Veresen I say, if you want to help the community of Coos Bay, you are an energy company. You could invest in helping us all to convert to renewable energy alternatives that would provide many more jobs in the long run. We would all thank you for that!

IND184-15

IND184-15    Comment noted.

Thank you,  
Martha Clemons  
1320 NW 30<sup>th</sup> St  
Corvallis, OR 97330

20150106-0038 FERC PDF (Unofficial) 01/02/2015

Oral comments to the Federal Energy Regulatory Commission (FERC) regarding its Environmental Impact Statement, dated November 2014 for the LNG terminal in Coos Bay, Oregon, proposed (FERC Docket No. CP13-483-000) by the Jordan Cove Energy Project, L.P. (JCEP), and the associated gas pipeline from proposed (Docket No. CP13-492-000) by Pacific Connector Gas Pipeline, L.P. (PCGP).

From Charles B. Miller, Ph.D., Prof. of Oceanography Emeritus, Oregon State University  
email: [charlie@arietellus.com](mailto:charlie@arietellus.com)

A strong probability has been established by Oregon State University geologist Christopher Goldfinger and colleagues that a powerful earthquake and tsunami sequence will be generated by the near-to-coast Cascadia Subduction Zone during the active life of the JCEP LNG terminal. The impacts added by the JCEP terminal to those of such an earthquake and tsunami are unacceptable.

Geoengineering consultants evaluating the likely earthquakes that could impact the Project used several Oregon Department of Geology categories of subduction "slip" as appropriate to the plant design. Earthquakes expected from all the applied categories have "Moment magnitudes," similar to Richter scale numbers, of 8.9 or 9.0. Such quakes are intensely violent. Tsunami expert Joseph Zhang produced tsunami models for JCEP, results of which are not explicitly shown in the EIS. The model is as good as could be done, but it includes only one incoming wave. There is no tsunami trough behind that. Real initial tsunami arriving inside bays are followed by tsunami troughs as deep below the original water surface as the wave was above it. Moreover, many equally large waves and deep troughs can continue for 10 to 20 hours after the first inrush. The sequences are prolonged horrors. The quake and tsunami in Tohoku, Japan, in 2011 tortured and killed the people of cities and coastal valleys for hour after hour.

The EIS should describe that horror sufficiently. Here is a preview. The shaking will move houses and other buildings off their foundations, generating rubble and trapping many people. Shaking at accelerations up to 70% of gravity will throw people down, tip shelving onto them, collapse roofs and walls, open impassable faults in streets, drop bridges, break natural gas lines (possibly including the PCGP) start fires, break water mains serving fire hydrants and the list goes on. All first responders and every other capable person will be fully occupied dealing with the immediate crisis. Then comes the tsunami. Anybody who has not departed for high ground, likely because they now cannot, can be swept away or drowned while trapped against some barrier.

**IND184 Charles B. Miller, Oregon State University**

IND184-16 Comment noted. See the earthquake and tsunami analysis in section 4.2.1.3. Also see the response to IND51-5.

IND184-16

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Immediately after a quake, the 24/7 emergency response teams at JCEP will be dealing with a wide array of impacts, once they manage to pick themselves up off the floors of their station. They will know that a tsunami will arrive in about 20 minutes, but before it does there will be so many things to deal with under impossible conditions of electric power outage, darkness, simultaneous rain and wind, injured plant workers, ..., that they will be lucky to get the LNG-transfer arms detached from a moored LNG carrier.

Actually, the tsunami will lift an LNG carrier moored in ~~the~~ JCEP basin, since its buoyancy will either pull out the bollards to which it is attached or will break the mooring cables. LNG carriers will either run aground or drift in the enhanced flow. The notion that tugboats are going to maneuver themselves and a carrier in the comings and goings of tsunami flow is a fantasy.

IND184-17

In the midst of all this, something on the ship or in the terminal is extremely likely to break and release LNG, all the excellent anti-acceleration, earthquake engineering notwithstanding. With the tsunami sequence, the causeway from Highway 101 to the plant will likely be gone or at least repeatedly covered with deep, moving water. The damaged terminal will be isolated, likely for days. All that follows will just have to be accepted as the will of Veresen investors and of the staff at FERC who approved construction of their terminal.

The likely impacts of LNG leaks are listed in *JCEP Resource Report 11 – Reliability and Public Safety* of May 2013. The main ones are from freezing induced by evaporating LNG and suffocation. Fire is an obvious possibility, though somewhat specific ignition conditions are required. Not much from *Report 11* is in the EIS. Add it and apply it to the not improbable megaquake and tsunami. Such damage to the plant will be an environmental impact of the first magnitude, particularly to plant staff and the public. The improved text will strongly imply FERC's responsibility to deny a ~~construction permit~~.

IND184-18

*Certificate of  
Public Convenience and  
Necessity!*

**IND184 Continued, page 10 of 22**

IND184-17 As stated in section 4.2.1.3, subsection Tsunami Hazards, the Emergency Planning and Response Team has reviewed and approved the LNG vessel procedures for dealing with tsunamis. This team includes, among others, the Coast Guard, ODE, Oregon Marine Board, and Jordan Cove Experts.

IND184-18 The Resource Reports are part of the analysis and are available for public review on FERC's eLibrary.

20150106-0038 FERC PDF (Unofficial) 01/02/2015

Comments to the Federal Energy Regulatory Commission (FERC) regarding its Environmental Impact Statement, dated November 2014, for the LNG terminal in Coos Bay, Oregon, proposed (FERC Docket No. CP13-483-000) by the Jordan Cove Energy Project, L.P. (JCEP), and the associated gas pipeline from proposed (Docket No. CP13-492-000) by Pacific Connector Gas Pipeline, L.P. (PCGP)

From Charles B. Miller, Ph.D., Prof. of Oceanography Emeritus, Oregon State University  
email: [charlie@arietellus.com](mailto:charlie@arietellus.com)

This remarkable document of 5048 pages, including appendices, fails despite its unapproachable length to mention key environmental impacts of "the project:"

- (1) In order for the pipeline and terminal to export liquid natural gas (LNG), natural gas must be available to them. The sources for wholesale natural gas in the western United States are imports from Canada and wells created by hydraulic fracturing that are spaced across the upper prairie in Colorado, across Utah and Southern California. The geologic and environmental damage from fracking needs to be addressed for the impacts of the JCEP/PCGP to be honestly represented in the final EIS.
- (2) While greenhouse gas (GHG) emissions are discussed and small contributions from the project are admitted. The CO<sub>2</sub> pollution from the ultimate burning of 15.6 million metric tons (Mt) of natural gas after export to Asia from the Project and from the similar one at Warrenton in the Columbia River estuary are not mentioned. Careful but simple calculation shows that this will amount to a 0.35% increase over the roughly 9 billion tons (Gt) of carbon burned annually around the globe. This seems like a small number, but relative to the likely global increase, it is large. *Most important, it moves fossil fuel consumption in the wrong direction.* That should be explicitly admitted by FERC (and thus by JCEP/PCGP) in the final EIS. As shown by the belittling mention in the EIS, FERC is aware of the role of anthropogenic CO<sub>2</sub> in causing global climate warming.
- (3) I note that the Environmental Protection Agency has admonished FERC to include GHG pollution from the ultimate burning of exported LNG in its impact statements for LNG plants (EPA comments to FERC, Dockets CP12-507 and CP12-508). U.S. President Obama has signed an MOA with the Republic of China to reduce U.S. carbon emissions substantially by 2025. According to *The Washington Post* (Nov. 12, 2014), "To meet its target, the United States will need to double the pace of carbon pollution reduction from 1.2 percent per year on average from 2005 to 2020 to 2.3 to 2.8 percent per year between 2020 and 2025." We cannot achieve anything close to that if we construct more fossil fuel infrastructure like JCEP. The final EIS must admit to the full GHG consequences of the Project. The project should be rejected by FERC for this reason alone.
- (4) The near certainty (e.g., Goldfinger et al. 2014) that a very great earthquake and tsunami sequence will be generated by the Cascadia Subduction Zone (CSZ) close inshore implies impacts from the Project on the cities of North Bend and Coos Bay, on the environments in and surrounding Coos Bay, that are inappropriately minimized in the EIS. This comment is extended below.

## IND184 Charles B. Miller, Oregon State University

- IND184-19 See the response to IND1-3.  
IND184-20 See the response to IND1-1.  
IND184-21 Comment noted.  
IND184-22 See the response to IND1-4.

IND184-19

IND184-20

IND184-21

IND184-22

#### Earthquakes and Tsunami

Project engineers and geoen지니어ing consultants evaluating the likely CSZ earthquakes that will impact the Project have selected categories suggested by the Oregon Department of Geology and Mineral Industries (DOGMI). They have gone back and forth between the M1 (medium) and L1 (large) categories of subduction "slip" as appropriate to the plant design and the impacts of the tsunami that would follow. Earthquakes expected from both the applied categories have "Moment magnitudes," similar to Richter scales numbers, of 8.9 or 9.0. Such quakes are intensely violent. Zhang (2012) and Coastal & Harbor Engineering (CHE 2013, cited in 2014) have run tsunami models of the Coos Bay by Zhang (2012) using the L1 category. Zhang also modeled the XL1 and XXL1 categories (yes, these are T-shirt sizes). CHE shifted the risk downward by using a tidal stand of "mean high water (MHW)" as the initial arrival time, whereas Zhang used mean higher high water (MHHW). On the other hand, CHE added a "safety factor" of 1.3-fold to predicted run-up heights, so the results cannot be very different (the Zhang results are widely available, the CHE results I can only find characterized in words at CHE 2014).

The Zhang model results are not explicitly shown in the EIS. They are shown in attached Figure 1. The projected run-up amounts to about 10 m or +30 feet, which, apart from a +60 ft wall around the LNG storage tanks, is the tsunami from which the design engineers hope to protect the terminal and power plant. While this is a solid analysis so far as it goes, it does not go nearly far enough. Problems:

- (1) The model's incoming wave rises from a high tidal stand, and then returns to it. Initial waves of real tsunami inside embayments like Coos Bay do arrive without much initial outflow (unlike on adjacent beaches), but they are followed by arrival of the tsunami wave trough, which can drop water level as far below the tidal stand as the initial wave was above it (Figure 2). Since the proposed LNG-carrier mooring basin will be only a few feet below carrier draft, a carrier will almost certainly be grounded, potentially damaging its hull, propellers and rudder.
- (2) The incoming wave apparently moves off upstream to infinity and is gone. That must be a necessary simplification to make the modeling possible. However, real tsunami encounter narrowing and shoaling that tip the elevated water back downstream. This rushing backflow carries debris from the prior earthquake: boats, cars, buildings, trees. It is those unforgivingly solid objects that cause much of the later destruction.
- (3) Real tsunami sequences are not just one wave (Figure 1). That is admitted in the EIS, to the extent that likely intervals to second and third waves, characterized as decreasingly great, are given (pages 4-244 & 245), though not shown in the Zhang model. After both the 1964 Alaskan and 2011 Tohoku, Japan, subduction earthquakes, the series of waves actually continued from 10 to 20 hours, wave after wave, often with the greatest amplitudes many hours into the sequence.
- (4) The EIS should describe that horror sufficiently that appropriate fear is aroused in the Project's investors and citizens living in its vicinity. The event will begin with an earthquake likely to reach  $M_w = 8.3$  to 9.0. Yes, there can be lesser earthquakes in the region, but the EIS should examine the worst-case scenario.

IND184-22  
cont.

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IND184 Continued, page 13 of 22

Here in respect to point (4) just above is my preview. The shaking will move houses and other buildings off their foundations, generating rubble trapping many people. Shaking at accelerations up to 70% of gravity will throw people down, tip shelving onto them, collapse roofs and walls, open impassable faults in streets, break natural gas lines (possibly including the PCGP) start fires, break water mains to fire hydrants, and the list goes on. All first responders and every other capable person will be fully occupied dealing with the immediate crisis. Then comes the tsunami. Anybody who has not, likely because they now cannot, departed for high ground can be swept away or drowned while trapped against some barrier.

The potential impacts of a megaquake on industrial facilities dealing with dangerous materials are clear from Gretel Ehrlich's description of what happened at the Fukushima nuclear plant in 2011:

"Not all waves are made of water. The workers described the earthquake as coming in two intense waves, and by the time the second one started, the pipes inside the Daiichi nuclear power plant that regulate the heat of the reactor and carry coolant to it were bursting open.... Oxygen tanks exploded, and the wall of the turbine building in reactor 1 cracked. A tangle of overhead pipes buckled. Others jerked away from the walls. Minutes later, but before the tsunami wave hit, the walls of reactor 1 began to collapse. A radiation alarm sounded and white smoke was seen coming from the top of the reactor."

Immediately after a quake, the 24/7/52 emergency response teams at JCEP will be dealing with a wide array of impacts, once they manage to pick themselves up off the floors of their station. They will know that a tsunami will arrive in about 20 minutes, but before it does there will be so many things to deal with under impossible conditions of electric power outage, darkness, simultaneous rain and wind, injured plant workers, ... that they will be lucky to get the LNG-transfer arms detached from a moored LNG carrier.

Actually, the tsunami will lift an LNG carrier moored in new the JCEP basin, since its buoyancy will pull out the bollards to which it is attached or it will break the cables. LNG carriers will either run aground or drift in the enhanced flow. The notion that tugboats are going to maneuver themselves and a carrier in the comings and goings of tsunami flow is a fantasy.

In the midst of all this, something on the ship or in the terminal is extremely likely to break and release LNG, all the excellent anti-acceleration, earthquake engineering notwithstanding. With the tsunami sequence, the causeway from Highway 101 to the plant will likely be gone or at least repeatedly covered with deep, moving water. The damaged terminal will be isolated, likely for days. All that follows will just have to be accepted as the will of Veresen investors and of the staff at FERC who approved construction of their terminal.

Keep in mind that in March 2014 a very small explosion at a Plymouth, WA, LNG storage facility shot a small chunk of shrapnel through its tank, forcing an area-wide

IND184-22  
cont.



20150106-0038 FERC PDF (Unofficial) 01/02/2015

IND184 Continued, page 14 of 22

evacuation. The risk from a megaquake affecting the JCEP terminal is the same in kind but huge in comparison. Leaking LNG will evaporate into a suffocating methane cloud. The potential for it to burn is obvious, though somewhat special conditions affect ignition.

#### FIGURES

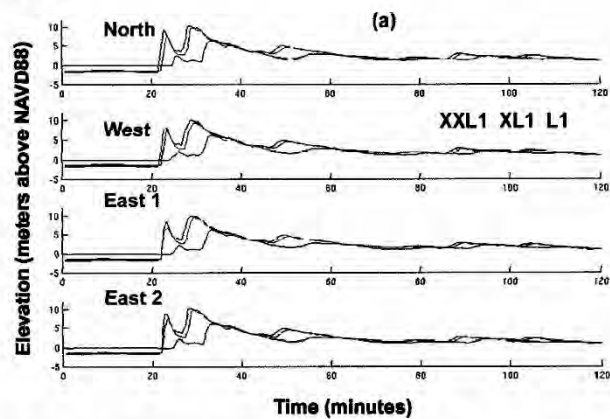


Figure 1. From Zhang (2012). NAVD88 is basically the level of Mean Higher High Water. The scale in meters translates as 10 m ~ 33 feet. North, West, etc are model estimates for water heights at three sides of the JCEP ship-loading basin.

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IND184 Continued, page 15 of 22

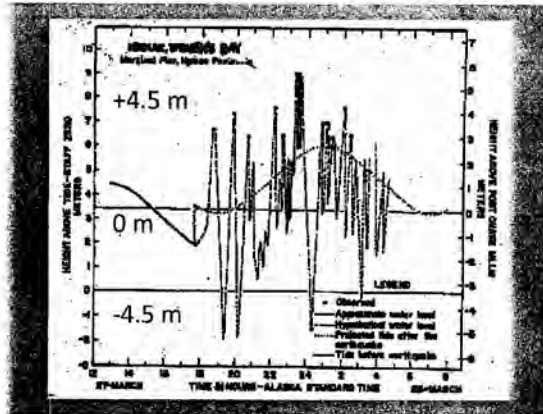


Figure 2. Water level from the tide gauge at the Coast Guard dock near the town of Kodiak on Kodiak Island, Alaska, on 27-28 March 1964. The initial event was land subsidence of 3.5 m, followed by arrival of a first tsunami wave 4.5 m above the new mean lower-low water level. A deep trough followed closely, dropping sea level by more than 8 meters. Great sloshing of second, third and later tsunami waves continued for over 10 hours. The greatest water level shift was 5 hours after the initial wave. From an internet source.

Figure 3A (next page). Tide gauge data ("marigrams," at left) from stations along the Tohoku Coast of Japan (map at the right) during the tsunami sequence after the 2011 Tohoku earthquake of  $M_w=9.0$ . The initial waves arriving between Miyako and Soma were all at least 9 m above predicted tide level, so large that they (or smashing debris) disabled the tide gauges. Gauges at Erimo, Hokkaido, Onahama and Oarai, with lesser initial tsunami, continued to operate. The earthquake was at 14:46 hours. The initial tsunami arrived at Ofunato, Fukushima prefecture, at 15:18, 32 minutes later. Surveys after things settled down showed damage to heights of 23 m (75 feet). Some run-ups along the Tohoku coast reached 40 m above sea level.

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IND184 Continued, page 16 of 22

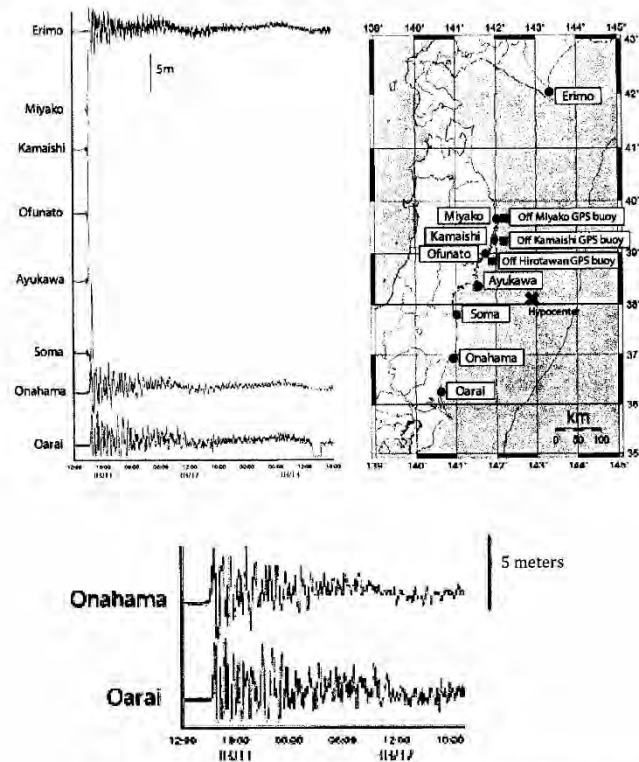


Figure 3B. Onahama and Oarai marigrams of Figure 3A enlarged. Tsunami come as wave sequences lasting hours, at Oarai 10 hours at full initial amplitude and ~20 hours before the sequence ended. Wave sequences where gauges were destroyed were also reported to have been similarly prolonged. Figs. 3A and 3B are from Ozaki (2011).

20150106-0036 FERC PDF (Unofficial) 01/02/2015

IND184 Continued, page 17 of 22

#### References

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- Coast & Harbor Engineering (March 14, 2014) Revised Supplement to Technical Memorandum – Tsunami Hydrodynamic Modeling Jordan Cove Energy Project, L.P., Docket No. CP13-483-000.
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- Henderson, Bonnie (2014) *The Next Tsunami, Living on a Restless Coast*. Oregon State University Press, Corvallis, Oregon. 322 pages. (A good, lay-level review of subduction zone science and the impact of tsunami our coasts.)
- Oregon Department of Geology and Mining Industries Tsunami Evacuation Brochures (maps and poster pages with evacuation instructions and precautions) are available for most of the Oregon coast at:  
<http://www.oregongeology.org/tsuclearinghouse/pubs-evachro.htm>
- Oregon Coastal Zone Management Program (April 2014) *Tsunami Guide*, 69 pages. (This includes advice to coastal communities and residents regarding subduction zone earthquakes and tsunami. Available at <http://www.oregon.gov/LCD/OCMP/docs/Publications/TsunamiGuide20140108.pdf>)
- Oregon Revised Statutes §455.447. Summarizes legislation relevant to citing of large, critical and hazardous facilities and structures in the seismic hazard and tsunami zones of Oregon.
- Ozaki, T. (2011) Outline of the 2011 off the Pacific coast of Tohoku Earthquake (Mw 9.0) - Tsunami warnings/advisories and observations. *Earth Planets Space*, 63 (no.8): 827-830. [Ozaki works at the Japan Meteorological Agency that operates tide gauges all along the Japanese coasts. Japanese tsunami scientists promptly issued detailed reports in *English* regarding the magnitude of the Tohoku events. Writing in English is typically a substantial extra effort for them, which they undertook so that places adjacent to subduction zones like Coos Bay could benefit from the Japanese experience. The EIS could profitably review this for local readers and note that the likely horror goes on an on.]
- Zhang, Y. Joseph (2012) Final report: Site-Specific Tsunami Modeling at the Jordan Cove LNG Facility, Coos County, Using New Cascadia Sources. Available at: [http://www.jordancoveenergy.com/FERC/Vol\\_1-F/RR6/Appendices/Appendix\\_C.6\\_4277-M\\_SITE-SPECIFIC\\_TSUNAMI\\_MODELING\\_2012\\_\(FINAL%2011-29-12\).pdf](http://www.jordancoveenergy.com/FERC/Vol_1-F/RR6/Appendices/Appendix_C.6_4277-M_SITE-SPECIFIC_TSUNAMI_MODELING_2012_(FINAL%2011-29-12).pdf)

20150106\_0038\_FERT\_PDF (Unofficial) 01/09/2015

#1 - Nemo Ron Ford  
#2 - 94615 Boone Ct Ln, OR (Sunnow)

USE THE BLUE RIDGE LNG PIPELINE ROUTE!

I do not want the pipe line through my property, nor do my neighbors

I will oppose and fight the LNG project, IF the supply line is routed through my property! I am not opposed to the LNG project when using the Blue Ridge route.

Start → Logically, why would Williams want to cut through 23 private properties when the Blue Ridge route is available?

The ~~route~~ <sup>now private property</sup> proposed: *route will*

Endanger many families  
Contaminates their water supplies  
Lowers their property values  
Makes it hard to sell or build on  
*harm Timber Lands & water ways*  
How could it be a better choice than the Blue Ridge route that crosses no private properties?

The Blue Ridge route crosses only a ~~half dozen~~ <sup>Eight</sup> water ways, compared to the 66 crossings on the private property route! Most of the Blue Ridge route follows an existing roadway. I understand that a spotted owl may have been seen, but going down the Blue Ridge roadway and working around their nesting season is an easy choice compared to the risks and damage caused by going through everyone's yards!

My family, myself and neighbors will support and work with the LNG project, IF the Blue Ridge route is used. We will do everything in our power to stop the private property *route*

*Blue Ridge - less Environmental Impact*

IND184 Ron F., Coos Bay, OR

IND184-23 Comment noted.

20150106-0038 FERC PDF (Unofficial) 01/02/2015

FERC Speech 2014-

FERC,

As a second generation landowner and farmer, and one directly affected by the current proposed pipeline route between MP 11.1R and 21.8, I am here with questions about the recently published Draft of the Environmental Impact Statement. I have reviewed the EIS and am curious about the following:

\*In the Draft EIS, several landowner's perspectives are accounted for in the argument against the Blue Ridge Route, but landowners' perspectives against the current proposed pipeline route that crosses from one end of my property to the other were withheld.

IND184-24

\*The Draft EIS discusses the impact to wildlife in arguments against the Blue Ridge Route, but fails to mention the impact/threat to human lives along the proposed route, including that of my family and my neighbors.

\*The Draft EIS addresses the 8 water bodies that would be crossed in the Blue Ridge route, but fails to mention the proposed route crosses 65 water bodies, including a major crossing at Catching Slough. The pipeline will bore through the end of my property and through a major berm of Catching Slough Rd, weakening the county road structure on top.

\*I want to know how FERC plans to address the county road that would potentially be on top of the proposed pipeline route, and how traffic will be limited due to weight restrictions. I am concerned, as many parts of our road cave in from standard use yearly.

IND184-25

\*Liquefaction is not addressed in the Draft EIS, and I am wondering how FERC and Williams propose to mitigate the situation when the pipeline already buried in unstable ground, rises to the surface in an earthquake.

IND184-26

\*The threat to my community and my livelihood is not addressed in the Draft EIS, and I am wondering how FERC plans to mitigate the potential loss of human life, and the threat to my children.

IND184-27

\*FERC fails to mention the disruption of farming activities that would occur if the pipeline crosses 75% of my property, and how my livelihood will disappear.

IND184-28

It is for these reasons, and others that I am in favor of the Blue Ridge Route, and urge FERC and others to join me in support.

Melissa Pallin

## IND184 Melissa Pallin

IND184-24 The DEIS provides an opportunity for all landowners and interested parties to provide comments. The comments of the Blue Ridge group are discussed because the group submitted an alternative and their comments are the basis for that alternative. The DEIS lists 12 waterbodies crossed for the Proposed Route and 9 for the Modified Blue Ridge Alternative. These numbers are based on hydrography data (see table 3.4.2.2-1). As noted in footnote d of that table, field surveys identified 41 perennial streams and 24 intermittent streams along the Proposed Route. Field surveys have not been completed for Blue Ridge route but they would most likely identify many additional small streams.

IND184-25 If the pipeline parallels a public roadway, the pipeline would not be placed directly beneath the road surface. In this situation the pipeline would be offset from the roadway or road easement such that operation and maintenance of the roadway and the pipeline would not interfere. Where the pipeline would make a perpendicular crossing of a public roadway, the pipeline crossing must be permitted by the appropriate authority (e.g. state DOT or county public works department). Typically, these regulating authorities require a perpendicular crossing of a public roadway to be designed to account for existing and expected future traffic loads and roadway maintenance, and no restrictions on future traffic would be required.

IND184-26 Liquefaction is addressed for the terminal in section 4.2.1.3 and for the pipeline in section 4.2.2.1.

IND184-27 Risks to human life are addressed in section 4.13. As stated in that section, nation-wide, the risk of death due to incidents involving natural gas transmission pipelines is low. Deaths from motor vehicle accidents are more than 20,000 times as great. Deaths from fires are 1,500 times as great.

IND184-28 Effects on farming are disclosed in section 4.1.2.2. As noted in that section, approximately 1,047 acres of agricultural land would be affected. Pacific Connector would negotiate with landowners and provide compensation of crop losses during construction. The topsoil would be saved and replaced after construction and any damages to irrigation, fences, or other facilities would be repaired. Shallow-rooted crops can be grown inside the 50-foot right-of-way. There would be no restrictions on deep-rooted crops on rest of the property would not be affected.

20150106-0038 FERC PDF (Unofficial) 01/02/2015

Federal Energy Regulatory Commission  
And Coos County Residents.  
Regarding Pacific Connector Gas Pipeline and Jordan Cove Energy Project, LP.  
Blue Ridge Alternate Route

December 8<sup>th</sup>, 2014

Blue Ridge road is and has been for years an improved paved road which serves as an all weather way to drive from the Fairview Coquille area to the Eastside area of Coos bay. It also serves as an escape and alternate way for the people who live in the Daniels Creek Road area should as it does become blocked every year from fallen trees, floods, and slides which can for days leave residents without electrical power and a way to reach town via the Daniels Creek Blue Ridge cutoff, located at mile 4.9 on Daniels Creek Road to Blue Ridge Road.

Blue Ridge Road is about 5 ½ miles long and only skirts Blue Ridge for about ¼ mile on the westerly side, riding another ridge altogether from the Summer- Fairview road on the south end to Stock Slough Road on the north end.

Being an improved road Pacific Connector Gas Pipeline LP can not remove it! PCGP LP calls for a 50 foot cleared forever easement which can not be paved or vegetation grown on except for grass if that to install a 36 inch underground highly pressurized liquid natural gas pipeline. No road could be put back on top of it! Measuring from Stock Slough Road south between mile marker 3 and 4 the ridge is barely if at all 50 in width. county map numbers of this area are T26 R12W Section 27. The slopes on either side are greater than 45 degrees down slope and drop from 300 to 400 feet vertical and at elevations of between 750 and 880 feet. The proposed Blue Ridge Alternate route coming from the Fairview areas cross roads starts at 135 feet above sea level only to sneak around the back side of Blue Ridge itself and climb to 1600 feet in elevation at and by the communication tower area past the fire fighting reservoir and down to the aforementioned narrow ridgeline on Blue Ridge Road. Which from the start up Blue Ridge has already plowed through a mile of old growth and will go through another mile before reaching Blue Ridge Road.

Looking and checking maps the best I can the original approved route follows an existing electrical power transmission line route which is cleared and has plenty of room to add in a pipeline without clearing any more timber for non replanted stripes through the county. The original route also stays mostly below 250 feet in elevation except for a ½ mile stretch a few miles northwest of Fairview, but is and will remain cleared because of the electrical transmission line route. This route as followed on google earth has very little timber at all other than alder which just has not been cleared as of 5/3/13 of google earth maps. The path is about 200 feet wide. Pasture land would even with a pipe line put back to pasture land with no problems of cattle or any livestock feeding on it according to PCGL LPs lawyers, told to the people at the May 30<sup>th</sup> 2014 meeting in Coquille Oregon at the county annex.

Slides and ground movements are a big part of the Oregon coast as per the annual rain fall we have. It would be a devastating problem to have a highly pressurized gas line rupture because it was put in a very bad place with no access should a catastrophe happen.

WE wish to thank FERC for finding also that the Alternate Blue Ridge Route is an

## IND184 David Schmidt and Kathi Windsor, Coos Bay, OR

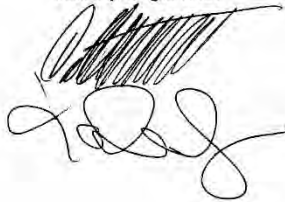
IND184-29 There is no intention to remove the road. If the pipeline parallels a public roadway, the pipeline would not be placed directly beneath the road surface. In this situation the pipeline would be offset from the roadway or road easement such that operation and maintenance of the roadway and the pipeline would not interfere. Where the pipeline would make a perpendicular crossing of a public roadway, the pipeline crossing must be permitted by the appropriate authority (e.g., state DOT or county public works department). Typically, these regulating authorities require a perpendicular crossing of a public roadway to be designed to account for existing and expected future traffic loads and roadway maintenance, and no restrictions on future traffic would be required.

20150106-0038 FERC PDF (Unofficial) 01/02/2015

IND184 Continued, page 21 of 22

environmentally and long term damaging idea.

Sincerely,  
David Schmidt and Kathi Windsor  
61433 Daniels Creek Road  
Coos Bay, Oregon 97420

A handwritten signature in black ink, appearing to be a stylized combination of the names David Schmidt and Kathi Windsor, written over a series of horizontal lines.



20150106-0038 PERC PDF

At the Jordan Cove Project, Not the woods

I am here tonight to express my opposition to the proposed LNG terminal at Coos Bay. Having reviewed the data compiled on this project, I think that the proposal to build this terminal is destructive to the community in Coos Bay & the whole Northwest region. It would entail an insane degree of risk. Only an entity so selfish as to prioritize corporate profits over the safety & well being of real people could possibly entertain the notion that this may be a 'good idea'.

The pipeline to the facility would require clear cutting of public & private land and would impair the safety of local residents who would be at risk for gas leaks, explosions, & pollution to the environment. The facility itself would store a million cubic ft of LNG that would be at risk of exploding. The Geologic record of our region indicates that we can expect a major earthquake in our area within a few decades. This facility is an unnecessary risk & the project should be abandoned.

The Environmental impact of using LNG should not be underestimated. Methane has 86 times the warming potential to effect our climate than does carbon dioxide. The warning signs are obvious - we must stop pursuing development of fossil fuel infrastructure while there is still time to change the course.

Thank you for your time,

Jason Monk

Jason Monk

**IND184 Jason Monk**

IND184-30 Comment noted. Safety is addressed in section 4.13 of the EIS; timber clearing in section 4.5; and seismicity in section 4.2. Also see our responses to comments IND1-2 and IND5-2.

20150106-0040 FERC PDF (Unofficial) 01/05/2015

IND185

**IND185 Multiple Comment Letters submitted to Paul Friedman at  
Public Scoping Meeting**

MEMORANDUM TO: Office of the Secretary  
FROM: Paul Friedman, FERC staff  
SUBJECT: Jordan Cove Liquefaction Project  
CP13-483  
Pacific Connector Pipeline Project  
CP13-492  
DATE: January 2, 2015

Please place the attached documents in the public files for the projects proposed by Jordan Cove Energy Project LP (Jordan Cove) in Docket No. CP13-483-000 and by Pacific Connector Gas Pipeline LP (Pacific Connector) in Docket No. CP13-492-000:

- Copies of comments from the public meeting held at Seven Feathers Conference Center, in Canyonville, OR on December 10, 2014.

The comments were provided to FERC staff. The documents are NOT confidential.

FEDERAL ENERGY  
REGULATORY COMMISSION  
2015 JAN -5 AM 9:48  
OFFICE OF THE SECRETARY

20150106-0040 FERC PDF (Unofficial) 01/05/2015

Dec. 10, 2014

**Comments on the Pacific Connector Gas Pipeline Draft EIS**

Please consider these comments in your decision.

I am not in favor of authorizing the Pacific Connector Gas Pipeline for the following reasons:

- o It does not comply with the intent of the NW Forest Management Plan to protect our natural resources. IND185-1
- o It does not comply with the Clean Water Act, as it will exceed sediment loads and water temperature allowances. IND185-2
- o The EIS does not adequately address safety issues. There is evidence that rural areas have weaker pipeline safety standards, i.e., fewer welds are inspected, thinner materials are allowed, and no internal inspections are required on the pipeline once it is in the ground. Emergency service response time may not be adequate to protect rural residents. IND185-3
- o This pipeline will take people's land against their will and without fair compensation. A for profit pipeline built for resource export is not a National priority for energy security and MUST NOT be built using Eminent Domain for property acquisition-this violates the basic requirements of eminent domain. IND185-4
- o The issue of temporary extra work areas should be addressed with specific acres and land-type identified. The EIS should state how many extra acres will need to be clear-cut for staging and work areas. IND185-5
- o Mitigations are inadequate. There is no back-up plan for failed reforestation efforts, long-term noxious weed management, or management for riparian buffers. Mitigations are inadequate for rare plant and animal species, especially those protected under the Survey and Manage requirements of the NW Forest Plan. IND185-6
- o The EIS does not discuss how the pipeline could influence the spread of wild fire. The application should consider the increased fire suppression costs and delays in fire suppression waiting for "experts" to arrive on scene to advice. The Emergency Response Plan in the EIS is not adequate. IND185-7
- o The EIS does not address Oregon Statewide Land Use Goals requiring conservation of the "carrying capacity" of our air and water. IND185-8

Respectfully submitted,

*Chris Rusch*

Chris Rusch  
P.O. Box 185  
Tiller, Oregon 97484

**IND185 Continued, page 2 of 3**

- IND185-1 Comment noted. Compliance with the Northwest Forest Plan is analyzed in for specific resources in the applicable sections of Chapter 4, see section 4.1.3 for a detailed assessment of effects on each National Forest and BLM District crosses. Also see the Cumulative Effects section (4.14).
- IND185-2 The Project must comply with all laws, including the Clean Water Act, or it will not be approved.
- IND185-3 See the response to IND1-7.
- IND185-4 See the response to IND1-5.
- IND185-5 This information is provided, for example see tables 4.1.2.2-2 and 4.6.1.2-2.
- IND185-6 Comment noted. Additional mitigation would be required by regulatory agencies prior to their issuing permits. For example, the FWS will determine the required mitigation for rare plants in their BO. See table 2.1.4-1 for a summary of mitigation required by the Forest Service and BLM on lands they manage.
- IND185-7 Fire is discussed in section 4.13 9.1
- IND185-8 As shown in table 4.14.3.1, the Project would disturb between 0 and 2 percent of any of the 19 fifth-field watersheds crossed by the project. On a state-wide basis the disturbance would be very small. We do not believe that the level of disturbance, while important at the local level, would affect carrying capacity at the state level.

20150106-0040 FERC PDF (Unofficial) 01/05/2015

FERC testimony re: Jordan Cove DEIS  
December 10, 2014  
F. Boyd Peters  
800 Railroad Ave.  
Wolf Creek, OR 97497

Thank you for the opportunity to testify.  
Apparently FERC is likely to bless the Jordan Cove Project.  
And sadly, several Oregon public agencies are tilted in the  
same direction. Governor Kitzhaber, dig in your heels.  
Ask the tough questions. Can Oregonians allow a foreign  
corporation to violate private landowners with eminent  
domain powers, and for an unneeded pipeline? Guess so.

The quote unquote "public benefit" is a tortured rationale  
supplied by a Canadian Corporation who will be the true  
beneficiary. First they wanted to import fuel, then they  
decided to export instead. In any event, the "public  
benefit" to this state is minuscule compared to the costs  
of plowing through a wild landscape, private and public.  
Governor, you like to fish. Over 200 stream crossings are  
proposed, not to bore under waterways, which is bad enough,  
but to crash through them. It's cheaper. More profit,  
with little public benefit.

The Jordan Cove terminal, sitting on a sand spit, opposite  
the nearby airport's runway, is an explosion waiting to  
happen whether by tsunami, earthquake or human error. Will  
there be a credible emergency preparedness plan in place  
for the Port of Coos Bay, that the U.S. Coast Guard will be  
ready to implement? Will the public costs be worth the  
foreign corporate profits?

Will the cleanup bond actually cover potential accidents  
and will closure costs be adequate when the project ends?  
These are questions the planning document must answer.

## IND185 Letters submitted to Paul Friedman

- IND185-9 The DEIS does not state anywhere in the document that the Project is in the public interest nor does it conclude that it provides a public benefit.
- IND185-10 The Coast Guard is responsible for preparing emergency plans.
- IND185-11 The FERC does not require that either Jordan Cove or Pacific Connector post bonds. However, Jordan Cove's June 10, 2014 MOU with the ODE requires the posting of a bond to cover retirement costs. Also, both companies would have insurance to cover the unlikely event of an incident.

20150106-0041 FERC PDF (Unofficial) 01/05/2015

IND186

**IND186 Multiple Comment Letters submitted to Paul Friedman at  
Public Scoping Meeting**

MEMORANDUM TO: Office of the Secretary  
FROM: Paul Friedman, FERC staff  
SUBJECT: Jordan Cove Liquefaction Project  
CP13-483  
Pacific Connector Pipeline Project  
CP13-492  
DATE: January 2, 2015

Please place the attached documents in the public files for the projects proposed by Jordan Cove Energy Project LP (Jordan Cove) in Docket No. CP13-483-000 and by Pacific Connector Gas Pipeline LP (Pacific Connector) in Docket No. CP13-492-000:

- Copies of comments from the public meeting held at the Oregon Institute of Technology in Klamath Falls, OR on December 12, 2014.

The comments were provided to FERC staff. The documents are NOT confidential.

05/01/2015 10:00 AM  
OFFICE OF THE SECRETARY  
2015 JAN-5 AM 9:49  
Federal Energy  
Regulatory Commission

20150106-0041 FERC PDF (Unofficial) 01/05/2015



**Pendleton Building Construction Trades Council**  
**AFL-CIO**

PO Box 230 • Hermiston, Oregon 97838

December 12, 2014

Federal Energy Regulatory Commission  
Draft Environmental Impact Statement  
Jordan Cove LNG Terminal and Pacific Connector Gas Pipeline  
Public Comment Hearing

On Behalf of the Pendleton Building & Construction Trades Council I urge the Federal Energy Regulatory Commission to approve the Draft Environmental Impact Statement and move forward with the construction of the Jordan Cove LNG Terminal and the Pacific Connector Gas Pipeline in Southwest Oregon.

Construction of the Jordan Cove LNG Terminal will employ a peak workforce of 2,100, with an average of 930 jobs lasting four years.

Construction of the Pacific Connector Gas Pipeline will employ a peak workforce of 1,400, with an average of 840 jobs lasting two years.

Both of the projects will pay Family Living Wages with health care and pension benefits.

The Jordan Cove LNG Terminal will pay an average of \$25 million per year in property taxes in Coos County. The Pacific Connector Gas Pipeline will pay an average of \$3 million per year in property taxes in Coos, Douglas, Jackson and Klamath Counties. These Counties have suffered for decades due to the loss of timber jobs in Southwest Oregon. This is much needed revenue for these Counties for all types of Public Services.

With an estimated cost of over 7 billion dollars this will be the largest project in Oregon history. This will show the world that Southwest Oregon is open for business.

Once construction on the Jordan Cove LNG Terminal and the Pacific Connector Gas Pipeline are completed they will employ hundreds of people in the day to day operations of these facilities.

These projects have been under review for over 10 years, now is the time to move forward with construction of both projects.

Thank you

  
Chuck Little  
Secretary/Treasurer  
Pendleton Building & Construction Trades Council

**IND186**      **Chuck Little, Pendleton Building Construction Trades Council**

IND186-1      Comment noted.

IND186-1

20150106-0041 FERC PDF (Unofficial) 01/05/2015



*International Brotherhood of Electrical Workers*

Local Union No. 659  
4480 ROGUE VALLEY HWY., SUITE 3  
CENTRAL POINT, OREGON 97502  
(541) 864-0800 • FAX (541) 864-0806



December 12, 2014

Dear FERC:

My name is Leonard (Lennie) Ellis and I am the Business Manager of International Brotherhood of Electrical Workers Local Union 659. Our offices are located in Central Point, Oregon and our jurisdiction covers the southern half of Oregon and the northern three counties of California. We represent over 2000 members in various trades and industries in that jurisdiction including; Inside Electricians, Outside Electrical and Telephone construction Linemen, + or - 95% of the public and privately owned electrical and gas Utilities, Line Clearance tree trimming, water districts and Electrical Manufacturing. With those 2000 members there are somewhere between 3000 and 6000 lives when you take into account their direct family members, all living in the lower half of Oregon and Northern California.

The proposed LNG export facility and pipe line will run directly through the middle of our jurisdiction. A good portion of our members live, work and play on the public and private lands in and around those areas which will be directly impacted by the project. I can assure you that they have closely studied this proposal and their opinion is that the minimal initial environmental impact will be far outweighed by the huge positive social and economic gains for their communities and all of Southern Oregon on the whole. Those counties along the route are some of the most economically depressed in the State and the schools and public services here are in dire need of the boon this project will provide for the next four to six years of the construction and the long term positive economic and tax impacts.

IND186-2

There are tens of thousands of miles of pipelines currently in operation in our state and although many of those pipelines are aging, accidents/incidents have been minimal at most. There are also hundreds of thousands of miles of overhead transmission and distribution lines in our state, many of which crisscross the path of the Pacific Connector route. While there may have been some nominal environmental disruption when the power line rights of ways and lines were initially installed the environment has adapted and in fact is now thriving in those areas. Avista utilities is our represented privately owned gas utility in our jurisdiction, they recently drilled under the Rogue river to extend one of their gas distribution lines, there was no outcry about that project and there was virtually no environmental impact on that major waterway.

**IND186      Lennie Ellis, International Brotherhood of Electrical Workers**

IND186-2      Comment noted.

2015-10-04 10:41 AM PDF (Unofficial) 01/05/2015

IND186 Continued, page 4 of 5

December 12, 2014

Page 2

We believe that the companies involved in this project have done a phenomenal job of looking at all of the short and long term environmental impacts and their plan is to make this project one of the safest for their long term viability. Although no one can truly predict the future i.e., tsunamis, earthquakes or other natural disasters, this fear has not dissuaded us from building many various facilities in places which *maybe* impacted by those possible occurrences. We have just endeavored to mitigate those risks to the best of our ability using the most current, safest and acceptable processes, materials and workmanship available to us at that time. These companies are investing a vast amount of money and we are comfortable that they have taken all the variables into consideration.

You have heard quite a bit of testimony from those Building Trades Unions and organizations whose members would receive a huge shot in the arm from this project. We would add that the IBEW has the best trained, most productive and safest electrical workers in the world

From all of our 2000 plus members we would like to thank you for your time and consideration and we are sure that you will make the most prudent, fact based decision possible regarding this project.

Most Sincerely;

I.B.E.W. Local Union # 659

Leonard (Lennie) Ellis  
Business Manager



20150106-0041 FERC PDF (Unofficial) 01/05/2015

IND186 Neal Eberlein

IND186-3 Comment noted.

NEAL  
EBERLEIN

Southern Oregon has spent 3 decades trying to recover from the demise of the lumber industry, living on government handouts, and watching our young people leave the area to find a job. We lag the rest of the country in recovering from the recent recession. This project is a lifeline, not only for the construction jobs and the taxes, but for the potential to access the pipeline itself. That would allow us the possibility of recruiting major industry to replace some of the lost timber jobs. This has great potential for economic development so we can again provide jobs and possibly share in some of the prosperity that the northern corridor enjoys. Oregon has thousands of miles of pipelines that operate safely every day. I am convinced that this pipeline can be built without destroying the environment that we all appreciate.

IND186-3

20150106-0039 FERC PDF (Unofficial) 01/05/2015

IND187

**IND187 Multiple Comment Letters submitted to Paul Friedman at  
Public Scoping Meeting**

MEMORANDUM TO: Office of the Secretary  
FROM: Paul Friedman, FERC staff  
SUBJECT: Jordan Cove Liquefaction Project  
CP13-483  
Pacific Connector Pipeline Project  
CP13-492  
DATE: January 2, 2015

Please place the attached documents in the public files for the projects proposed by Jordan Cove Energy Project LP (Jordan Cove) in Docket No. CP13-483-000 and by Pacific Connector Gas Pipeline LP (Pacific Connector) in Docket No. CP13-492-000:

- Copies of comments from the public meeting held at Umpqua Community College in Roseburg, OR on December 9, 2014.

The comments were provided to FERC staff. The documents are NOT confidential.

Federal Energy  
Regulatory Commission  
2015 JAN -5  
2015 JAN -5 PM 9:00  
OFFICE OF THE SECRETARY

20150106-0039 FERC PDF (Unofficial) 01/05/2015

Elliott Grey  
25494 Hall Rd  
Junction City, Oregon 97448

December 9, 2014

FERC Jordan Cove LNG Plant Talking Points

I urge you not to make your decision regarding the siting of the Jordan Cove Gas Pipeline and LNG Plant within a vacuum. You must make decisions within the context of what's going on in the world. While jobs and profits are important factors to be taken into consideration, they must be measured against the greater impacts. Given recent IPCC report as mentioned in the NY Times dated November 31, 2014, we can no longer expect to maintain temperature changes to below the goal of 2 degrees C and given our current CO2 and Methane emissions trend, we are more likely headed toward 4 C to 10 C degrees.

Given the landmark announcement by President Obama and President Xi Jinping of China committing the world's two largest carbon polluters to cuts in their emissions by 2025, we can no longer continue to expand our capacities in fuel extraction and consumption. If we continue to build capacity, how are we going to meet the United States goal to cut its emissions up to 28 percent by 2025? Our carbon consumption budget is coming to an end.

It's inaccurate to say that negative environmental factors can be mitigated given our limited CO2 and methane budget given the timeframes we are dealing with now. The studies finding that the impacts of this project can be mitigated are either naive or misinformed given the increases in emissions and the rate of temperature rise.

We must stop this magical thinking that we can just mitigate these seemingly little negative environment impacts and wake up to the fact that the earth's capacity to absorb these injuries has come to an end, at least in terms of carbon, methane and other greenhouse gases. We have no alternatives for sequestering carbon and we have no time to wait for them to be developed.

The Jordan Cove LNG plant will be the second largest emitter in the state. The largest, the Boardman coal burning power plant, is being phased out due to its effects on the environment. This will make Jordan Cove the largest emitter.

This spring, a report by 13 federal agencies concluded that climate change would harm the American economy by increasing food prices, insurance rates and financial volatility. Is this report taking these projections into account when stating the impacts are minor and can be mitigated?

And speaking of mitigations, who is going to bear the costs of the mitigation? Who is going to pay the costs of the impacts to the roads with the large trucks traveling on them, fire departments having to add additional staff and equipment, port dredging, etc; the public, certainly not the pipeline companies or the gas companies.

Thank you.

How can you mitigate the loss of 926 Acres of Marbled Murrelet WHEN THE STATE OF OREGON is planning to allow clear-cut logging IN THE ELLIOTT STATE FOREST, THE MAIN PRIME HABITAT of the murrelet?

IND187 Elliott Grey, Junction City, OR

IND187-1 Comment noted.

IND187-2 Comment noted.

IND187-3 The applicant would be responsible for mitigation and road repair costs.

20150106-0039 FERC PDF (Unofficial) 01/05/2015

December 9, 2014

Re: Docket #s CP 13-483-000  
CP 13-492-000

Federal Energy Regulatory Commission - Jordan Cove and Pacific Connector Pipeline Project

Federal Energy Regulatory Commission (FERC) staff has concluded that approval of this project will result in some limited adverse environmental impacts but mitigation efforts will substantially reduce them, and has given approval to this project.

This project will destroy old growth forests as well as habitat for endangered species. How does FERC or Verisen, one of the foreign companies that is planning this project, plan to mitigate the destruction of an old growth forest? It takes hundreds of years to create an old growth forest and all the intricate life forms that interact so perfectly within it. It's impossible to mitigate the damage or re-create the webs of life that live within this type of forest. The Bureau of Land Management, the Umpqua National Forest, the Rogue River National Forest, and the Winema National Forest will all be told to amend their environmental standards so that a foreign company can then be legally allowed to wreak havoc on our lands, waters, wildlife, and marine life. In addition, our own government will allow Oregonians' lands and homes to be condemned via eminent domain and our land given to these foreign companies in order to build a 230 mile pipeline through our state. The gas will then be processed in Coos Bay under extreme pressure to turn it into liquified natural gas (LNG) and export it to Asian markets. FERC is willing to allow our natural resources to be destroyed, to have our homes and lands be taken from us and given to a foreign company, and to build and operate an extremely dangerous and potentially explosive LNG processing plant in Coos Bay, in an earthquake and tsunami region (FERC did not address this), and then export this fossil fuel to Asian markets for burning. How is this in Oregon's best interests? How is this reducing greenhouse gas emissions? You want us to take all these risks in return for some jobs that might last a year or two.

I read the summary of your draft environmental impact statement and I did not see you address the climate impacts of natural gas production (fracking), or the burning of all of this fossil fuel. Climate policy experts and scientists are warning that it may already be too late to prevent our planet's atmosphere from rising 3.6 degrees F – the tipping point at which the world will be locked into a future of drought, food and water shortages, melting ice sheets, rising sea levels, and widespread flooding. Natural gas is a fossil fuel, and when produced and burned, releases greenhouse gases such as methane and carbon dioxide into our atmosphere and oceans, causing them to warm up. How is this project going to mitigate global warming? It will only exacerbate the problem, not only in Coos Bay where it would be processed, but also when all the fuel is burned. Asia's appetite for energy is increasing. They will continue to burn coal, in addition to the LNG we provide. The world must limit its use of fossil fuels if we hope to give our grandchildren a livable planet. This project must be stopped. Many of those who will speak in favor of this project are those who want to make money from it. Everyone wants someone else to take responsibility for global warming, while they themselves make money from a project. Yes, we need jobs, but not in the fossil fuel industry. Let's invest our future in clean energy projects – solar, wind, tidal, geothermal, etc. The Verisen Company wants to make money at our expense, and will do everything in their power to complete this pipeline – local homeowners, safety, and the environment be damned. But I say we Oregonians must stand up and say this project will not be built.

Mary Addams 1657 Wilson St., Eugene OR 97402

## IND187 Mary Addams, Eugene, OR

IND187-4 The mitigation measures that would be required for impacts to habitats are described in sections 4.5 through 4.7, as well as in appendices E, F, and S of the DEIS.

IND187-5 We addressed the risks and measures that would be implemented due to the projects construction in an area at risk of earthquakes and tsunamis in the DEIS. Specifically, section 4.13 of the DEIS addresses the safety and reliability of the project. In addition, Jordan Cove would be required to design and construct its facilities to satisfy stringent design standards and codes that provide design requirements for geological conditions, including earthquakes and tsunamis.

IND187-6 Nowhere in the DEIS is there a statement that the Project would be in the “public interest.” In fact, the Commission would make its finding of public benefit in its decision-document Project Order. The EIS is not a decision-document. The Commission would issue its Order after we have produced an FEIS. The Project's potential impacts related to greenhouse gas emissions are disclosed in section 4.12 of the DEIS. It is the Department of Energy, not the FERC, that regulates the U.S. Energy policy.

IND187-7 Fracking, or hydraulic fracturing, is used during exploration and production of natural gas. As stated in our response to IND1-2, the FERC does not regulate the exploration or production of natural gas. In fact, fracking is not part of the Project; and therefore, the environmental impacts associated with that activity will not be analyzed in our environmental document. See response to IND1-3. The gas emissions that could result from gas burned at the proposed Jordan Cove power plant (i.e., a non-FERC jurisdictional facility) are disclosed in section 4.12 of the DEIS.

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I'm Jean Townes from Corvallis. It is a moral imperative that an EIS in these times must consider the effects not just locally but on the planet we all share. The environmental impacts of this project are far beyond just the lands, ecosystems, and people along the pipeline and in Coos Bay. The regulatory and permitting structures and process that are being used were developed in the context of a time and climate that we have had. That time is past and the climate is in a deepening crisis.

Permitting new infrastructure to support the export and burning of additional fossil fuels at this point in the developing global climate crisis is immoral. The EIS devotes a few pages out of 5048 to considering Climate Change. It states that "Although the Project emissions would contribute to the overall amount of atmospheric Greenhouse gasses, it is impossible to quantify the impacts that the emissions of GHG from construction and operation of the Project would have on Climate Change." So because it is not possible to quantify EXACTLY how the emissions from this project affect the climate crisis it is apparently not necessary to consider it further.

This project will support a significant increase in greenhouse gas emissions in the extraction, transportation, processing and burning of natural gas. The gas moving through the pipeline will be coming from fracked gas wells which contaminate ground water and which NOAA has found leak large amounts of methane which is a greenhouse gas 30 times more potent than CO2. The NEW power plant that will be built to power the liquefaction of the gas, will be emitting large amounts of CO2. After Boardman closes it will have the largest carbon footprint of any single facility in Oregon. The ships transporting the LNG will be burning fossil fuels and the gas when it gets burned in Asia will add large amounts of heat trapping carbon to the atmosphere.

Permitting this project is about enabling investors to make a LOT of money. What about our moral responsibility to the children and grandchildren of this planet? What about the people of Bangladesh, the arctic villages and Miami who are being affected by flooding

IND187 Jean Townes, Corvallis, OR

IND187-8 See the response to IND1-1.

IND187-8

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IND187 Continued, page 5 of 17

driven by the rise of sea levels? What about the disruption of water supplies for the countries dependent on snow melt from the Himalayas? What about severe droughts in agricultural regions which are significantly reducing harvests? What about the melting of the permafrost which will release enormous new amounts of climate changing methane into the atmosphere? What about the dying coral reefs and the juvenile clams that can no longer form shells because of ocean acidification? What about the extraordinary storms and rainfall events? What about what scientists are calling The Sixth Great Extinction?

In this world of climate crisis all of our environmental impact decisions MUST begin with making the potential effects on the climate the centerpiece of any EIS. It is our moral responsibility to do everything that we can to leave a livable planet for our descendants and for all the living beings that depend on this beautiful earth. Approving this project would be abdicating this responsibility.

There is no Planet B.



Jean Townes

37084 Moss Rock Dr

Corvallis, OR 97330

[townesj@peak.org](mailto:townesj@peak.org)

541-745-5210

20150106-0039 FERC PDF (Unofficial) 01/05/2015

December 9, 2014

Stuart Liebowitz  
143 SE Lane Avenue  
Roseburg, Oregon 97470  
Kimberly Bose, Secretary, FERC  
888 First Street NE  
Washington, D.C. 20426  
RE: Jordan Cove Energy Project  
Docket # CP 13-483 -000  
CP 13-492 -000

Dear Secretary Bose,

As a member of the Douglas County Global Warming Coalition, I strongly oppose the construction of the Jordan Cove Energy Project. It is fallacious to assert this project does not have an unacceptable impact on climate change. Data from the Environmental Protection Agency shows that once Oregon's only coal plant closes in 2020, this project will be the highest greenhouse gas emitter in the State of Oregon. A recent United Nations report warned that at the present rate we are burning fossil fuels - and that includes ill-conceived projects such as Jordan Cove - in 30 years we are condemned to a nearly 4 degree temperature rise or higher. And during the next 30 years, Jordan Cove would add 60 million tons of deadly greenhouse gas pollution to the atmosphere. We must say no to the Jordan Cove Energy Project.

President Obama recently set a goal of reducing greenhouse gas emissions 28% by the year 2030. Yet the United Nations has found that our efforts are being offset by these dirty fossil fuel exports. We must say no to the Jordan Cove Energy Project.

The National Climate Assessment released in March stated that here in Oregon, we are already seeing the devastating impacts of climate change - ocean acidification, melting snowpacks and increased wildfires. To protect our State, we must say no to the Jordan Cove Energy Project.

According to NOAA, 2014 is on track to become the hottest year on record.

**IND187     Stuart Liebowitz, Roseburg, OR**

IND187-9     Comment noted. See also our response to comment IND5-1.

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IND187 Continued, page 7 of 17

RE: Docket # CP 13-483  
CP 13-492

2

Scientists warn we are in a race to prevent our planet from becoming uninhabitable. Sixty million tons matter. We must say no to the Jordan Cove Energy Project.

You hold our future in your hands. I urge you to find the courage, the rationale, to say no to the Jordan Cove Energy Project - for the sake of the children we cherish, the grandchildren we adore and this planet we all call home.

Sincerely,

Stuart Liebowitz



20150106-0039 FERC PDF (Unofficial) 01/05/2015

Comments on the Jordan Cove Project

12-9-14

**1. Extend the comment time:**

Today we are being asked to give you intelligent comments on the DEIS, 5,000 pages released less than 2 weeks ago. I'm not sure how you expected us to have reviewed it in such a short time.

Even the February 13 deadline for comments is too short. Please extend the comment time, especially for west coast people who's letters take up to a week longer to get to your DC office than other parts of the country.

For electronic comments: Don't shut down your site the day before comments are due, as you did when our scoping comments were due on this project in 2012. At that time, the day before scoping was due, when most people are trying to maneuver your archaic and difficult electronic submission site, we were told it was shut down for maintenance. It is inconsiderate of you to shut your site down in the highest use time for submitting comments.

**2. Maps**

Maps in the DEIS have a number of problems – many are such poor resolution they are unreadable, and no one could use them to find project components on the ground, like the mitigation sites proposed for Forest Service and BLM lands.

I want to thank the BLM for trying to get me better maps for some areas, but most of the BLM route, we can't get better maps. The first place I went for help was the useless FERC help line. When I asked for a map to even see the location of the BLM mitigation sites, I was told by FERC Help, "No" because the person sitting in DC, who had no intention of ever using the maps said "I can read the maps". I just want to point out here that the FERC Help site in DC has never been any help at all.

What would really be helpful for us to fully evaluate this project within the short time you have allowed is for us to have the GIS data. Then we could evaluate this project using the best on-line electronic maps.

But you have refused to release the good GIS maps of public land impacts... You even refused to give me GIS maps of my own property that you want to use for your pipeline.

The reason given is: "a competitor could locate and construct a competing<sup>1</sup> pipeline if good maps were provided to us. That is ridiculous.

But not funny is the next reason given on why we can't have good GIS maps. It is because someone could blow up the pipeline easier. "Pacific Connector would suffer substantial.... Harm if it's facilities were subject to attack".<sup>2</sup>

<sup>1</sup> Letter to Forrest English from BLM, 1278 (OR-955) 8-2-13. attached

<sup>2</sup> id

**IND187 Francis Eatherington,**

IND187-10 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

IND187-11 Comment noted.

IND187-12 Comment noted.

IND187-13 The FERC does not have the GIS data.

IND187-10

IND187-11

IND187-12

IND187-13

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We often get good GIS maps for BLM and FS projects. But now for this project we can't because you think someone might blow it up? If someone wanted to blow it up, they wouldn't need GIS maps. Once it's built, it will be very obvious on google-earth where the pipeline line is. All you are doing is blocking and stalling the public from being able to provide adequate input.

Since the reason given for no GIS maps is the pipeline could be attacked, FERC should have considered a potential attack in the DEIS, especially impacts to our homes. But you didn't mention an attack at all in the DEIS.

### 3. Safety

Most of us living along the pipeline route are considered in what is called a "Class 1" location because there are less than 10 families living along 1 mile of the pipeline. This means our safety is further compromised because you are allowing lower safety standards on our lands.

Because we live in a Class 1 area, you are allowing thinner pipes, to bury it higher, have less welds and inspections, weaker leak tests, and a host of other cost-saving, profit enhancing measures for the energy corporations, because if it blows up, only a few of us would die.

Weaker pipeline safety standards are being used even though Douglas County has much greater inherent risks than urban areas, like steep, erosive, landslide prone slopes and forests prone to forest fires.

Our scoping comments asked you to at least consider giving us the same safety protections that you give people in urban areas. But the DEIS did not consider those scoping comments, and in fact, it didn't consider virtually any of our scoping comments.

### 4. Climate Change

The DEIS talks about how climate change can impact this project. But nowhere does the DEIS discuss how this project can impact climate change. Since the DEIS admits climate change is happening, NEPA requires you consider how this massive fossil fuel project will impact our climate. Because this project depends on increased fracking and transportation, methane leaks are more prevalent. Since methane is 86 times more potent than carbon, FERC cannot claim natural gas is a bridge fuel. Instead, FERC should have considered the pervasive leaks in the system on our climate and on future generations.

Submitted by Francis Eatherington  
francis@eatherington.org 541-643-1309

### Attachments:

\*Climate Impacts of Natural Gas Production and LNG Export, a Synopsis of Current Science. August 2013

\* Pacific Connector Pipeline Safety Issues Specific for Rural Southern Oregon

\* Letter from BLM to Forrest English stating the pipeline is "subject to attack" if we have GIS maps to view the pipeline route on google earth.

IND187-14

IND187-15

IND187-16

## IND187 Continued, page 9 of 17

IND187-14 We do not expect an attack. Table 4.13.9.2-2 of the draft EIS shows the various causes of outside force incidents on natural gas pipelines as recorded by the DOT between 1994 and 2013. Included in these statistics is "intentional" damage, which would include an attack. As shown in table 4.13.9.2-2, there was one incident of intentional damage to natural gas pipelines during this time period, or 0.1 percent of all recorded incidents.

IND187-15 See the response to IND1-7.

IND187-16 See the response to IND1-1.

20150106-0039 FERC PDF (Unofficial) 01/05/2015

**Pacific Connector Pipeline Safety Issues  
Specific for Rural Southern Oregon**

Different safety standards are required for pipelines in rural areas. Most of southern Oregon is in a "Class 1" location because there are 10 or fewer buildings on a one-mile length of pipeline. This could put rural Oregonians in greater danger than people in urban areas when the 230-mile long pipeline for the Jordan Cove terminal is built.

Examples of how southern Oregon would be treated differently than urban areas include<sup>1</sup>:

- \* Fewer welds are required to be inspected or tested, 10% verses, 100% in urban areas.
- \* Thinner pipes are permitted.
- \* No internal inspections are required on the pipeline once it is in the ground.
- \* Pipelines are buried 6" higher.
- \* Maximum distance to block valves is greater.
- \* Hydrostatic test pressures are weaker.
- \* Maximum allowable operating pressure is greater.
- \* Frequency of pipeline patrols and leak surveys are less often.

Out of the 230 miles of the proposed Pacific Connector pipeline, 212 miles are in a Class 1 location<sup>2</sup>, allowing Pacific Connector significant cost savings in pipeline design. This is because, if an accident occurs, only a few of us would be impacted, perhaps die, instead of the hundreds that would be impacted in an urban area.

Weaker standards are allowed even though there are significantly more inherent risks in Oregon's rural areas. The route through southern Oregon is over the unique geological features of the rugged Cascade and Coastal mountain ranges, including steep and unstable slopes, rocky terrain, with earthquake and high forest fire potential areas. Rural families also dig more for utility installation and farming projects than residents in Class 4 areas.

The weaker pipeline standards were not considered with the inherent site-specific southern Oregon risks in mind. Our government should request Federal Energy Regulatory Commission (FERC) to reexamine the reasons for reduced safety features for rural families and question whether they are valid for our specific area.

FERC should disclose how much money Pacific Connector is saving with the weaker regulations. Those cost saving should be given to local governments to enhance emergency response abilities in the rural pipeline areas.

IND187-17

Compiled February 2014.

Electronic copies of any references listed below are available on request. 541-643-1309

<sup>1</sup> CFR Title 49, Part 192, Transportation of natural and other gas by pipeline: Minimum Federal Safety Standards: <<http://ecfr.gpoaccess.gov/cgi/t/text-idx?c=ecfr&sid=b024b0040734d9320f6b3a1c1aee13e1&rgn=div5&view=text&node=49:3.1.1.1.3&idno=49#49:3.1.1.1.3.2.9.3>>

<sup>2</sup> FEIS 2009. Page 4.12-54 through 56.

**IND187 Continued, page 10 of 17**

IND187-17 As stated in IND1-7, FERC does not set safety standards for pipeline construction. We do not have any information on the cost savings requested and any savings associated with these standards are not a consideration for FERC's analysis.

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Public Comment December 9, 2014 in opposition to the Jordan Cove/Pacific Connector draft Environmental Impact Statement

Barbara Brown, Member  
Neal C Brown Family LLC  
4085 Ilex St. NE  
Salem, OR 97305

FERC EIS states: Land ownership along the pipeline route is approximately 31 percent federal, 68 percent private, and 1 percent state lands. About 64 percent of the land that would be crossed is classified as forest, 17 percent is agricultural land, 10 percent is rangelands, and about 7 percent is urban or built-up lands. Seven residences were identified within 50 feet of the pipeline construction right-of-way, and Pacific Connector has proposed site-specific measures to minimize impacts on these residences. What will Pacific Connector do to mitigate potential well water contamination? What will they do to mitigate the emotional distress of the property owner who now has a home within range of a potential pipeline explosion? What will they do to mitigate the loss in property values? These concerns are not mitigated by minimal easement payments because no amount of money will remove those risks. The only mitigation proposed by Pacific Connector is to conduct the construction work during daylight hours to minimize noise for the homeowners. This is the least of the homeowner's worries!

IND187-18

FERC EIS states: While there are no groundwater wells that supply public drinking water systems within 400 feet of the proposed Pacific Connector pipeline construction right-of-way, there are seven wellhead protection areas that would be crossed by the pipeline route. **Pacific Connector identified five private wells within 150 feet of the pipeline, but none of these are used for drinking water (irrigation only).** This appears to be incorrect information supplied by Pacific Connector. Our neighbor will have the pipeline cross her property within 50 feet of the well that supplies her drinking water. Is there other incorrect information supplied by Pacific Connector which the EIS is based on?

IND187-19

Regarding river crossings, FERC EIS states: ... Pacific Connector would use dry open-cut methods (including dam-and-pump and fluming) at the remaining water body crossings. Again, impacts from dry crossings would be temporary and localized, with most construction occurring at a single crossing within a 48-hour period, and models predicting TSS levels less than 100 mg/l within 10 m downstream of the crossing. The pipeline will cross the Middle Fork of the Coquille River on our property. The impact will not be temporary. The area the pipeline will cross is an area where family members picnic and fish. All of the large Oak trees that provide shade for the fish habitat will be removed. There will be a 100 feet wide swath of bare land across the river where it is currently shaded with many old and young trees. It is my understanding that the pipe will be laid in a trench across the river during low river levels. In the winter what will protect the pipe from floating debris when the river rises as it does each year? What will happen to the fish when the shade is gone? They are not likely to return anytime soon.

IND187-20

1 of 3

## IND187 Barbara Brown, Salem, OR

- IND187-18 Risks to human life are addressed in section 4.13. As stated in that section, nation-wide, the risk of death due to incidents involving natural gas transmission pipelines is low. Deaths from motor vehicle accidents are more than 20,000 times as great. Deaths from fires are 1,500 times as great. Effects on property value are addressed in section 4.9.2.3. See the response to IND1-5 for your comment on eminent domain.
- IND187-19 Many domestic water supply wells are not registered or identified in publicly available state databases, and therefore not all wells in the vicinity of the proposed pipeline have been identified. This is explained in section 4.4.1.2 of the draft EIS. Pacific Connector would verify exact locations of water supply wells, springs, and seeps during easement negotiations with landowners.
- IND187-20 Details on waterbody crossings are disclosed in section 4.4.2.2. Also see FERC's Plan and Procedures. Effects on fish are described in sections 4.6 and 4.7.

20150106-0039 FERC PDF (Unofficial) 01/05/2015

IND187 Continued, page 12 of 17

Public Comment December 9, 2014 in opposition to the Jordan Cove/Pacific Connector draft Environmental Impact Statement

Barbara Brown, Member  
Neal C Brown Family LLC  
4085 Ibex St. NE  
Salem, OR 97305



Looking upstream of proposed Pacific Connector crossing of Middle Fork of Coquille River in Camas Valley. In winter the river will be considerably higher.



Looking downstream of proposed Pacific Connector crossing of Middle Fork of Coquille River in Camas Valley.

2 of 3

20150106-0039 FERC PDF (Unofficial) 01/05/2015

Public Comment December 9, 2014 in opposition to the Jordan Cove/Pacific Connector draft Environmental Impact Statement

Barbara Brown, Member  
Neal C Brown Family LLC  
4085 Ibex St. NE  
Salem, OR 97305

FERC states: Removal of shade by clearing streamside riparian vegetation would not greatly increase water temperatures. The maximum predicted increase was 0.3°F at one 2-foot-wide crossing; and modeling indicated that in stream water temperatures would return to ambient conditions within a short distance downstream from all crossings. This contradicts the Oregon Forest Practice Act contained in Oregon Administrative Rules 629.

IND187-21

FERC further states: The pipeline route would cross 15 fifth-field watersheds with portions located in the transient snow zone (2,000- to 5,000-foot elevation range), affecting about 2,121 acres within the transient snow zone. Only clearing that permanently alters canopy cover could affect long-term peak flows. When only considering forest clearing within these 15 watersheds, pipeline disturbance to forested vegetation types would represent only 0.07 percent of the total area of these watersheds; which we do not consider to be a significant adverse impact. Evidently our river crossing is not contained in this count because it is not in Forest Zone but in Farm/Forest. How many other river crossings are not contained in the 0.7 percent of total watersheds?

IND187-22

"The FERC staff concludes that approval of the Project would result in some limited adverse environmental impacts." There is no mention of the financial and emotional impacts to the human beings that will be permanently affected by the pipeline and Jordan Cove facilities during and after construction. Are there any laws or regulations that will protect the people from unnecessary seizure of private property for the unsubstantiated promises of "jobs" for the unnamed few?

IND187-23

FERC concludes: If the Project is found to be in the public interest and is constructed and operated in accordance with the recommended mitigation measures, we conclude that it would be an environmentally acceptable action. Our conclusions are based on information provided by Jordan Cove and Pacific Connector; analyses and field investigations by Commission staff; review of comments from federal, state, and local agencies; and input from public groups and individual citizens. Who defines "public interest" and with what criteria? Are there any laws to protect the safety and property rights of the citizens?

IND187-24

## IND187 Barbara Brown, Salem, OR

- IND187-21 This estimate is based on right-of-way clearing studies in Oregon and on established models. We are not clear how this contradicts rule 629 for forest practices.
- IND187-22 The number of acres cleared in the farm zone would be too small to affect the 0.7 total.
- IND187-23 Claims under eminent domain are not considered by the court, a judge would determine whether eminent domain applies and the rights of property owners, including fair compensation.
- IND187-24 The Commission would make its finding of public benefit in its decision-document Project Order. The Commission would issue its Order after we have produced an FEIS.

20150106-0039 FERC PDF (Unofficial) 01/05/2015

Testimony from:  
Lowen Berman  
5908 NE 32<sup>nd</sup> Ave  
Portland, OR 97211  
503-407-8749  
[kalmkalm@msn.com](mailto:kalmkalm@msn.com)

For the first time in human history the sky really is falling. Climate change is the greatest challenge facing humanity now or perhaps ever in its' history. To suggest that LNG is a solution to climate change is the same as arguing that throwing kerosene on a fire is a good way to put the fire out because kerosene is less flammable than gasoline. LNG is not a "bridge fuel". It is a bridge to catastrophe. Putting any resources into new fossil fuel infrastructure is simply madness. All available resources must be used to expand sustainable energy production and conservation.

It is also incorrect to argue that LNG, which is primarily methane, is less polluting than other petroleum products because it produces less CO<sub>2</sub> when burned. In fact, methane is 30 times more potent than CO<sub>2</sub> as a heat trapping gas and it is estimated that 3% of the methane extracted and transported in LNG production will be leaked directly into the atmosphere. This is a point not usually mentioned by the LNG industry's advocates.

Lastly, please note that LNG is not a replacement for existing fossil fuel infrastructure. We have not heard of any plans to dismantle existing oil or coal facilities. Rather, LNG is an ADDITION to an already out of control problem.

I beg of you to stop this insanity and say no to the Jordan Cove LNG Terminal and Pacific Connector Pipeline and all other fossil fuel infrastructure expansion.

IND187-25

**IND187 Lowen Berman, Portland, OR**

IND187-25 The DEIS does not make these claims. Furthermore, it is the Department of Energy, not the FERC, that is responsible for the U.S. energy policy.

20150106-0039 FERC PDF (Unofficial) 01/05/2015

Jordan Cove

Testimony -- Kelly O'Hanley -- December 9, 2014

My name is Dr. Kelly O'Hanley. The purpose of my testimony is to call attention to the effects on wildlife that would be caused by the building an LNG pipeline across the State of Oregon.

IND187-26

Pipeline construction would likely have substantial, unintended and deleterious consequences on forest habitats. A 95-foot swath of clear-cut forest through 75 miles of public forests, by definition, fragments the forests and creates extensive new "forest edges". Most ecologists will tell you that, in balance, forest fragmentation and additional forest edges are a bad thing. Many forest-dwelling species avoid forest edges. Therefore, both dispersal and general connectivity are decreased. Habitat loss negatively affects breeding success and foraging success. Also, there is usually higher predation pressure along forest edges. Edge habitats experience microclimatic changes - including increased evaporation, increased temperature, increased incident solar radiation, and decreased available soil moisture.

Examples of species known to have been negatively affected by forest fragmentation include pine martens, brown creepers, spotted owls, and gray wolves.

An additional negative effect of a band of deforested land is that it provides a gateway for introduction of non-native invasive species.

The collateral damage caused by the pipeline effects species that, unfortunately, are not able to come here today to testify on their own behalf. I am but their poor messenger. I pray that you will keep these animals and their welfare in your minds and hearts. If you do so, there is only one right answer open to you that would protect their well-being. That is to say "no" to proceeding with an LNG pipeline across the State of Oregon.

Thank you

**IND187 Kelly O'Hanley**

IND187-26 Impacts to wildlife and their habitats are addressed in sections 4.6 and 4.7 of the DEIS.



2015p106-0039 FERC PDF (Unofficial) 01/05/2015

After reviewing the Draft Environmental Impact Statement (DEIS) for the Jordan Cove Energy and Pacific Connector Gas Pipeline Project (PCGP) it appears you failed to adequately address the decommissioning of the pipeline and its right-of-way. In Section 2.7 of the DEIS you address the decommissioning and restoration of the facilities at Coos Bay and provide monies for that purpose but you failed to provide money or a plan to decommission the pipeline and its right-of-way. In Section 2.7 of the DEIS you state the life of the project to be about 30 years and in Section 2.1.5 (Right-Of-Way Grant) of the DEIS you state that the BLM and NFS permits to cross their lands for a "30 year term." Based on the DEIS findings that other gas export terminals on the west coast are in the planning stage (Section 3.2.2.4 of the DEIS), one in Alaska page 3-10, one in Oregon page 3-8 and 7 in British Columbia page 3-10 of the DEIS. It appears the DEIS finds there is enough existing natural gas pipelines in the area to provide natural gas for the foreseeable future (Section 3.2.1 page 3-5 of the DEIS) and with ever changing technology there is a very good chance in 30 years or less there will be no need for this project. I also think the final EIS should address the return of private

IND187-27

IND187-28

**IND187 Tim Ryan, Days Creek, OR**

- IND187-27 As stated in section 2.7, this would require a separate application and analysis under section 7(b) of the NGA.
- IND187-28 See the response to the previous comment.

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IND187 Continued, page 17 of 17

right-of-way lands, once restored, back to private landowners. This would prevent PCGP from selling or donating the right-of-way lands through private properties. I would like the final EIS to include:

- A An indepth plan for the removal or abandonment of the pipeline.
- B A plan to restore the right-of-way lands as best as possible and return it to the private landowners.
- C Money set aside for A and B (in the form of a bond, not a letter of credit or intent).

If these provisions are not included in the final EIS there is a good possibility the final owners of the PCGP will file bankruptcy when the project is no longer financially feasible. For this reason a letter of credit is not acceptable. They need to put up a bond for this purpose. In closing I do not want the taxpayers stuck with the environmental cleanup of 232 miles of 36" abandoned gas pipeline.

IND187-28  
cont.

Tim Ryan  
PO Box 246  
Days Creek OR 97429  
timryan4418@yahoo.com  
541-825-3564

20150106-0043 EXHIBIT (b)(5) DPP (b)(5) ACP 1/5/2015

IND188

**IND188 Multiple Comment Letters submitted to Paul Friedman at  
Public Scoping Meeting**

MEMORANDUM TO: Office of the Secretary  
FROM: Paul Friedman, FERC staff  
SUBJECT: Jordan Cove Liquefaction Project  
CP13-483  
Pacific Connector Pipeline Project  
CP13-492  
DATE: January 2, 2015

Please place the attached documents in the public files for the projects proposed by Jordan Cove Energy Project LP (Jordan Cove) in Docket No. CP13-483-000 and by Pacific Connector Gas Pipeline LP (Pacific Connector) in Docket No. CP13-492-000:

- Copies of comments from the public meeting held at Central Medford High School, Medford, OR on December 11, 2014.

The comments were provided to FERC staff. The documents are NOT confidential.

Federal Energy  
Regulatory Commission  
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20150106-0943 FERC PDF [Unofficial] 1/5/2015

IND188 Stacie Smith, Medford, OR

FERC TESTIMONY

CC: Letters to the Editor  
Ashland Daily Tidings

Open Letter to Governor John Kitzhaber:

By saying NO to the proposed Liquefied Natural Gas pipeline, Oregon can show what true environmental protection in action looks like.

I'm a 4<sup>th</sup> generation Oregonian whose children and grandchildren were born not far from the Rogue River. I'm writing on behalf of my family and that beloved river.

I respectfully suggest that you sit beside and listen awhile to one of the rivers that would be directly impacted by the pipeline, before coming to a decision about the matter.

Please be courageous now in the face of pressure from the oil industry to impose expansion of its reach. As Oregon's chief executive please use your influence to stop the pipeline's destructive path through our beloved state and beyond.

The push for construction of the pipeline can be met and stopped when enough Oregonians understand what is at stake: the wellbeing of the land, the water, and the air that sustain us.

I appeal to your affection for Oregon's lands and waterways. Thank you for your efforts on behalf of the power of limitation -- a renewable, sustainable, and as yet largely unexplored resource available to us all.

Sincerely,

*Stacie Smith*

Stacie Smith  
PO Box 1404  
Medford OR 97501  
staciesmith64@gmail.com

20150106-0943 FERC PDF (Unofficial) 1/5/2015

**Federal Energy Regulatory Commission (FERC) Public Hearing on  
Jordan Cove Pacific Connector Proposal for  
Liquefied Natural Gas (LNG) Pipeline and Export Facility Project.**

December 11, 2014

Testimony of:  
Donna Swanson  
863 Plum Ridge Drive  
Ashland, OR 97520

I have prepared a visual display to attempt to illustrate the enormous scale of this project and the potential for destruction it will bring to our State. Oregon is a popular tourist destination because of its natural environment, beauty, and sporting opportunities.

Here is the State of Oregon (pointing to display).

- This is the proposed 234 mile route of the LNG pipeline from Melin to Coos Bay.
- Along this route the pipeline will need to traverse nearly 400 streams and waterways and five large rivers: the Rogue, Coquille, Coos, Umpqua, and Klamath. This requires tunneling under the rivers and streams, rerouting of the rivers during construction and severe disruption to the flow of the river and to the habitat of fish.
- The actual pipe is 36" (3 feet) in diameter compared to the average 8-9" gas pipeline. The pipeline will carry Methane gas, a colorless odorless gas to be liquefied at the proposed facility at the coast and shipped to foreign countries.
- This is an unbelievable number of rivers we are giving over to untried methods and for commercial gain. Why are we being offered as a conduit for the transport of fracked gas from Canada and the U.S. for export? IND188-1
- It is not for the public good, nor to help the jobless in Coos Bay and environs, it is for export to Asia and the financial benefit of Verisen, a Canadian firm. This company will be causing the public to pay for the cost of global warming simply from the leakage of the methane that occurs in the transportation and delivery of the gas. IND188-2
- In the event of a leaking pipe or disaster, methane gas is released and because it is an odorless/colorless gas its location will be difficult to pinpoint. The value for methane is 35 - 85 times carbon dioxide, depending on the number of years assessed (100 year Global Warming Potential is 35, the 20 year GWP is 84-86). Only about 2-3% needs to leak to negate the combustion advantage of methane over oil/coal. And leak it does from the

**IND188 Donna Swanson, Ashland, OR**

- IND188-1 The methods for stream crossings are discussed in section 4.4.2.2. These are not untried methods, they have been used successfully for years. Also see FERC's procedures for waterbody crossings. Also see the response to IND1-3.
- IND188-2 Comment noted. The DEIS evaluates the environmental effects of the proposed project. The Commission will determine whether the Project is for the public good.

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IND188 Continued, page 4 of 16

- fracking site through the pipes to the end - often it is way above that critical percentage.
- The pipeline route is located in both earthquake and Tsunami zones. In the event of a disaster, we will be paying a great price both physically and financially.
  - The latest projections say that fracking and LPG has a lifespan of approximately 20 years it will no longer be profitable to continue the practice of fracking, with lower prices, less demand, and fracking coming online in other countries. So our environment and natural beauty is being compromised for a very short-term gain, and the gain is not ours.
  - California and Washington protect their coastlines by not allowing this kind of commercial development and the shipping of fuels, so the LNG producers are looking to Oregon. The Canadians aren't interested in exporting their gas from Canadian ports preferring that we assume the risk.

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To: State and Federal Officials

From: Kathy Dunn

Read By Vanessa Nowitzky

IN MY OPINION, THIS FRACKING PIPELINE THAT IS PLANNED TO BE BUILT BETWEEN KLAMATH FALLS AND COOS BAY IS NOT GOING TO HAPPEN FOR THE FOLLOWING REASONS:

**ECONOMIC:** Temporary jobs will have little impact, even in the short term. Long term profits will go to already rich corporations that (not whom) get breaks on taxes, so potential trickle-down economic impact both state-wide and nationally will be nil. The detrimental effects of toxins will affect farmers, timber families and anyone who wants to toss a worm in the water (either fresh or salt) and catch a fish.

IND188-3

**ENVIRONMENTAL:** The risk of carcinogens and a multitude of other effects from fracking are well documented. This pipeline will unquestionably harm wildlife on land and in water, our precious waterways themselves, every bit of vegetation, the land itself, and people. Please note: people will be physically, emotionally and psychologically harmed due to fracking. It's happening elsewhere and there is no doubt that it will happen here. We value the wetlands of the Klamath Basin, the headwaters of our rivers, the earth that gives us life itself and the vital port of Coos Bay. Our environment here is both sensitive and rare, the most diversified botanically short of the rainforest. **Don't frack it up!**

IND188-4

**ETHICAL:** For the afore-mentioned reasons and many more, Keystone is going down and so will this. Southern Oregonians may be small in numbers, but will not let this happen. If you don't see a lot of faces at this hearing, it just might have something to do with scheduling it at a time of year when folks are at their busiest with the Holidays...I find this timing...interesting. Our numbers and the power of our voices will grow and will be heard.

**IN CONCLUSION:** The planned fracking pipeline between the Klamath Basin and Coos Bay can be summed up in one word: OBSCENE. Thank you for your full attention to this issue.

Kathleen L. Dunn, Public Schoolteacher (disabled/retired)

1935 Ashland Mine Rd. Ashland OR 97520, 541-482-8330

*Kathleen L. Dunn* 12-11-14

**IND188 Kathy Dunn, Ashland, OR**

IND188-3 The effects on employment and the economy are addressed in section 4.9.1.4.

IND188-4 The Project does not include fracking. See the response to IND1-3.

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12/11/14

To whom it may concern:

My name is Susan Delles I live in the Evans Creek Watershed on Sykes Creek Rd-R4W-TWP34s-Section 26 in the BLM Butte Falls Resource Area. I have spent 30 years commenting on various BLM projects through the NEPA process.

I am extremely concerned and appalled about the Jordan Cove Pipeline which will go through our Resource Area. Even though I personally don't live that close, I believe the character and quality of life of our entire Resource Area and that of the Rogue Valley will be negatively changed by this intrusion.

#### RIVERS

This pipeline will cross 379 bodies of water including five major rivers. It will affect the community of Trail Creek on the Rogue River which is a major Coho spawning area. I am personally familiar with that area where I have written comments on various BLM projects. This project will destroy that watershed and seriously threaten the Coho fishery on the Rogue River. I am totally opposed to the idea of tunneling under the Rogue River which is a major body of water for recreation and tourism.

Water quality limited streams are already a problem for our Southern Oregon fisheries. The potential damage to Riparian Zones and sediment delivery could have major impacts on the stressed fish populations some of which are endangered.

#### ACCIDENTS

The possibility of accidents due to leaks and possible explosions are made more probable by the lower safety standards approved for rural areas. The possibility of fires, due to explosions caused by leaks are especially of concern in Southern Oregon when summer drought conditions are highest. Fires spread rapidly in this area.

The companies chosen to build the pipeline-Williams and PP&L have poor safety records. PP&L is still fighting lawsuits from the city of San Bruno over destruction of houses and properties caused by a gas leak a number of years ago.

#### PRIVATE PROPERTY

Most private land owners that are impacted by this project are opposed to it. As a land owner I can empathize with these people. The use of "eminent domain" for the right-of-way by a foreign company against American land owners should be illegal. The compensation received in most cases will not be what the land is worth and the decrease of resale value is obvious.

#### COOS BAY

Many people in Coos Bay are in favor of this project because of the jobs that will be created. Is the environmental damage to the Coos Bay estuary by dredging and the loss of endangered wild life really worth it? Have you also considered the threat of building this terminal on an earthquake subduction zone?

IND188-5

IND188-6

IND188-7

IND188-8

## IND188 Susan Delles, Rogue River, OR

IND188-5 The Project would have little effect or no long-term effect on the Rogue River. The pipe would cross under the river either using HDD or direct tunneling. See the discussion in section 4.4.2.2. See section 4.6.2.2 for effects on fish.

IND188-6 See the response to IND1-2.

IND188-7 See the response to IND1-5.

IND188-8 See the response to IND1-4 in regard to earthquakes. See section 4.6.1 for effects in Coos Bay. See section 4.7 for effects on listed species.



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2

There are many other problems with this project with limited time for presentation. Other issues are included below.  
This project is a boondoggle that will create large profits for some corporations at the expense of the residents and tax payers of this state. Please reconsider your decision.  
Thank you for your consideration.

**Other Issues**

Climate Change- The IPCC report 11-1-14 determined a need to reduce our reliance on fossil fuels by over 80%. How will this massive fossil fuel project fit into that reduction? This was not adequately addressed in the analysis.

Wildlife/Endangered Species -The clearcuts required for this project will heavily impact wildlife, especially endangered species that depend on these forests. Ocean species such as whales and sea turtles would also be impacted. Twenty Nine federally listed or threatened species would be affected.

Exporting Gas overseas will probably increase gas prices here and we will not see any of the benefits of this project.

Increase of fracking in the interior west means increased water use in dry climates and increase of methane leaks.

Susan Delles  
2801 Sykes Creek Rd  
Rogue River OR 97537  
[sdelles@jeffnet.org](mailto:sdelles@jeffnet.org)

**IND188 Continued, page 7 of 16**

IND188-9 See the response to IND1-1.

IND188-10 See section 4.61.2 for the effects of right-of-way clearing in wildlife.

IND188-11 A 2012 study by the Energy Information Administration (EIA) of the U.S. Department of Energy (DOE) stated: "...U.S. natural gas prices are projected to rise over the long run, even before considering the possibility of additional exports." Another 2012 study by NERA Economic Consultants for DOE found that the nation is "...projected to gain net economic benefits from allowing LNG exports."

IND188-12 Your comment on water use is noted. See the response to IND1-3.

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*Diana O'Farrell, Ashland, OR*

**CONFUSING COMMENTS FROM FERC ABOUT ITS SCOPE**

Despite the Federal Energy Regulatory Commission's clear authorization to examine cumulative environmental impacts of the Jordan Cove Export Terminal/Pacific Connector Pipeline, its Draft Environmental Impact Statement has made some confusing statements that must be addressed more clearly.

We ask that FERC specifically re-examine its assumption that the project does not demand increased fossil fuel extraction and further that FERC take this into consideration when examining the cumulative environmental impacts of the project and evaluation of the project's public benefit.

In its draft statement, FERC claims its analysis precludes consideration of "out of scope" issues such as: "the need to export LNG; horizontal hydraulic drilling through shale formations during exploration for natural gas (often referred to as "fracking"); induced production of natural gas; "life-cycle" cumulative environmental impacts associated with the entire LNG export process..."

FERC also claims "The 'life-cycle' cumulative environmental impacts, from exploration, production, and gathering of natural gas; transportation to Pacific Connector; and shipment of LNG overseas from the Jordan Cove terminal are far beyond the jurisdictional authority of the FERC ...."

Despite these claims, its draft statement argues that "induced or additional natural gas production is not a "reasonably foreseeable" indirect effect of the Project, and is not addressed..."

IND188-13

**IND188 Diana O'Farrell, Ashland, OR**

IND188-13 Comment noted. See the response to IND1-3.

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IND188 Continued, page 9 of 16

Page 2

This is confusing since the Department of Energy (DOE) states:  
"According to Jordan Cove, this ... [project]... will support increased  
production of natural gas from shale formations ...."

Furthermore, the FERC analysis states that "existing transmission  
pipelines in the western states are underutilized. So, in this case there  
is surely no need for the project, unless it is expected that further  
natural gas will be extracted to meet the expectations of Jordan Cove -  
which, of course, the Department of Energy notes, is the case.

The Federal Energy Regulatory Commission must be made to provide  
what it was clearly given authorization to do: to examine cumulative  
environmental impacts of the Jordan Cove Export Terminal/Pacific  
Connector Pipeline and give a thorough impact statement. "Clear" is the  
operative word - without it no intelligent conversation can be had about  
the Project, which should lead to the best decisions about our present  
and future environmental concerns that will impact us for decades to  
come.

IND188-13  
cont.

20150106-0943 FERC PDF (Unofficial) 1/5/2015

ELIZ

**JC - PC HEARING COMMENTS**

**Speaker 1 – Inter-generational Justice and Climate Urgency**

- 1) Speak on behalf of those without a voice – the children unborn or too young to understand – our children and grandchildren.
- 2) We must all place a high priority on leaving for future generations a planet that offers them something resembling the hospitality it has offered us.
- 3) The scientific evidence is as clear as science ever gets:
  - a. The Planet is warming
  - b. Human actions are largely responsible through emitting gases from fossil fuel extraction and consumption.
- 4) The Projections are equally clear:
  - a. Absent our concerted and urgent action, at some stage within a few decades, the current trajectory of greenhouse gas emissions will cause the planet to cross a critical tipping point of warming
  - b. We do not know exactly when that will be but the math tell us we could easily emit enough pollution within the next 14 – 15 years to pass an internationally agreed target limit of 2 degrees Centigrade.
- 5) The math tells us that to keep global warming below that critical target level, we must leave the majority of known fossil fuel reserves in the ground.
- 6) It is incumbent upon all of us, in our individual daily lives, in our professional activities, and through collective agreements to minimize the emissions of greenhouse gases whenever we can.
- 7) We are here to urge the Federal Energy Regulatory Commission to exert the leadership that its responsibilities to the future demand and evaluate this proposal in relation to its potential impact on global climate chaos

IND188-14

**IND188 Continued, page 10 of 16**

IND188-14 See the response to IND1-1.

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Louise

**JC - PC HEARING COMMENTS**

**Speaker 2 – The critical climate role of FERC**

- 1) FERC's responsibility in analyzing this proposal is clearly stated in the DEIS itself: evaluating the 'need and public benefit' of the Project.
- 2) FERC acknowledges the need to evaluate the project in terms of NEPA (the National Environmental Protection Act)
- 3) The Chairwoman of the President's Council on Environmental Quality has stated quite clearly that in evaluating the environmental impact under NEPA, agencies know they should consider greenhouse gas emissions.
- 4) FERC acknowledges also that the evaluation should include cumulative environmental impacts of the project and alternatives.
- 5) Additionally, FERC acknowledges that evaluating the cumulative environmental impact should include consideration of the impact of this project along with other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions.
- 6) We are here to encourage FERC to conduct exactly the kind of analysis that it is authorized to undertake, including the cumulative environmental impact of this and other projects.

IND188-15

**IND188 Continued, page 11 of 16**

IND188-15 Comment noted. See section 4.13 for the cumulative effects analysis.

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DIANA H

**JC - PC HEARING COMMENTS**

**Speaker 3 Confusing Comments from FERC about its scope**

- 1) Despite the clear authorization to examine cumulative environmental impacts of this and other projects (as stated earlier), FERC claims: its analysis precludes consideration of 'out of scope' issues such as: "the need to export LNG; horizontal hydraulic drilling through shale formations during exploration for natural gas (often referred to as "fracking"); induced production of natural gas; "life-cycle" cumulative environmental impacts associated with the entire LNG export process...."
- 2) FERC also claims in the DEIS that: "The 'life-cycle' cumulative environmental impacts, from exploration, production, and gathering of natural gas; transportation to Pacific Connector; and shipment of LNG overseas from the Jordan Cove terminal are far beyond the jurisdictional authority of the FERC or the activities directly related to the Project."
- 3) Despite these claims, the DEIS argues that "induced or additional natural gas production is not a "reasonably foreseeable" indirect effect of the Project, and is not addressed..."
- 4) This is confusing since the Department of Energy states: "According to Jordan Cove, this ... [project]... will support increased production of natural gas from shale formations ...."
- 5) Furthermore, the FERC analysis states that "existing transmission pipelines in the western states are underutilized." If this is the case, there surely is no need for the project, unless it is expected that further natural gas will be needed to meet the export expectations of Jordan Cove – which, of course, is exactly the case.
- 6) We ask that FERC specifically re-examine its assumption that the project does not demand increased production and further take this into consideration when examining the cumulative environmental impacts it indicates it will undertake.

IND188-16

**IND188 Continued, page 12 of 16**

IND188-16 Comment noted. Cumulative impacts are addressed in section 4.14 of the EIS.

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MARY ANN

**JC - PC HEARING COMMENTS**

**Speaker 4: Wildlife Impacts**

- 1) About one third of the proposed Pacific Connector Pipeline (about 70 miles) will cross Forest Service and Bureau of Land management land.
- 2) Additionally 10% of its distance will pass through Late Successional Reserve forest.
- 3) To allow such action, in conflict with the Northwest Forest Plan, the SUFS and BLM are rewriting their Land Management Plans to accommodate the proposed pipeline.
- 4) These revisions involve the designation of currently unprotected forest as Late Successional Reserve.
- 5) While some of this redesignated forest might be equivalent as wildlife habitat to that being lost, this is not guaranteed.
- 6) Furthermore, the purpose of the protection is to conserve wildlife habitat; this definitional shell game simply allows habitat destruction without protecting the current habitat.
- 7) Given the problems of enhanced 'edge effect' in the remaining forest, and the fragmentation impact of the pipeline, two influence which cannot be mitigated by redesigned Land Management Plans, many species of wildlife are placed at risk.
- 8) As a result FERC acknowledges that the project "would result in impacts to 62 species on 386 known sites" across the BLM and USFS lands in Coos, Douglas, Jackson, and Klamath Counties and would negatively impact 11 Threatened, Endangered or Other Status Species.
- 9) USFS and BLM Land Management Plans are carefully designed to protect forest health and wildlife.
- 10) Regulations protecting our publicly owned natural resources should not be broken for a project that simply serve corporate profit
- 11) I ask FERC to revisit the Cost-benefit analysis and ask if the loss of forest and wildlife habitat is really balanced by the limited public benefit this project promises.

IND188-17

**IND188 Continued, page 13 of 16**

IND188-17 The FERC does not engage in cost-benefit analyses, as such. Instead, the Commission developed a "Certificate Policy Statement" (Certification of New Interstate Natural Gas Pipeline Facilities, 88 FERC ¶ 61,227 (1999), clarified in 90 FERC ¶ 61,128, and further clarified in 92 ¶ 61,094 (2000)) that established criteria for determining whether there is a need for a proposed project and whether the proposed project would serve the public interest. The Certificate Policy Statement explains that in deciding whether or not to authorize new natural gas facilities, the Commissioners must balance public benefits against potential adverse economic and environmental consequences. The DEIS discloses the potential impacts of construction and operation of the Project on environmental resources, such as effects on wildlife, and outlines measures that would be implemented to avoid, minimize, or mitigate those impacts. The DEIS also discloses benefits of the Project, such as job creation and increased payment into local tax bases. In terms of global warming, see response to IND1-1.

20150106-0943 FERC PDF (Unofficial) 1/5/2015

Doug

**JC - PC HEARING COMMENTS**

**Speaker 5 Cost-benefit Analysis and Concluding Remarks**

- 1) There can be little doubt that the combined Pacific Connector Pipeline and Jordan Cove Export Terminal Projects will directly and indirectly contribute substantially to global greenhouse gas emissions.
- 2) Undoubtedly, the main benefactors are corporate profits and executive salaries in Calgary, Alberta (where Veresen is based).
- 3) The terminal project promises some short term construction jobs, though FERC states that average employment over the construction of the terminal will be about 130 local individuals, the rest are expected to come from elsewhere (CA and WA).
- 4) Meanwhile, when completed, the terminal will provide only 145 permanent jobs, of which 45 are likely to be imported labor.
- 5) Pipeline construction, however, will offer short term (about 8 months) employment to an average of 280, with 50% expected to be non-local.
- 6) When completed, the pipeline will have a permanent staff of five (5).
- 7) Meanwhile, the project will make this one of the largest greenhouse gas emitting projects in the state, probably soon to be 'the largest.'
- 8) The estimated direct greenhouse gas emissions from the project will result in an annual social cost of between \$25 million and nearly \$244 million dollars, amounts that do not even take into consideration emissions from extraction and combustion of the exported methane.
- 9) There can be no doubt that to those individuals who gain employment from the project, whether temporary or permanent, there are substantial economic benefits. Unfortunately the social global cost of this project is immense.
- 10) Please ask yourselves what you will say to your grandchildren when they ask you what you did - as a member of the Federal Energy Regulatory Commission - to slow the rate of global warming when project proposals came through your office for evaluation.
- 11) We therefore urge FERC Commissioners to reconsider the true cost of this product taking into consideration its impact on our children and grandchildren.

IND188-18

**IND188 Continued, page 14 of 16**

IND188-18 Comment noted, See the response to IND1-1 and IND188-17.



20150106-0943 FERC PDF [Unofficial] 1/5/2015

**FERC HEARING COMMENTS 12/11/14 (Part 5, Doug)**

As a part of Southern Oregon Climate Action Now's (SOCANS) joint statement, this is a Cost-benefit Analysis and Concluding Remarks of our 5 part joint statement of today.

***It is clear that it is within FERC's purview and discretion to include the impacts of Natural Gas Fracking and Potential Greenhouse gas emissions related to this project as part of the analysis of the ecological impacts of the project. The Federal energy Regulatory Commission has made a serious error in not including these impacts within this draft document.***

IND188-19

- 1) There can be little doubt that the combined Pacific Connector Pipeline and Jordan Cove Export Terminal Projects will directly and indirectly contribute substantially to global greenhouse gas emissions.
- 2) The main benefactors of this ill-conceived project are not the people of Oregon, or indeed the American people at all. Corporate profits and executive salaries of the Canadian corporation Veresen are at stake. Not the needs of the people.
- 3) On the bright side, the terminal project promises some short term construction jobs, though FERC states in its own writings of 260 jobs 130 would likely be local, the rest are expected to come from out of state. Pipeline construction of about 8 months will employ 280 people. Perhaps half of those jobs may be sourced locally.
- 4) When completed, the terminal will provide only 145 permanent jobs, of which 45 are likely to be imported labor. This is only a net gain of 100 Oregon jobs.
- 5) When completed, the pipeline itself will only have a permanent staff of five (Hand sign) 5 long term jobs as net benefits to our communities in Oregon
- 6) Jordan Cove will be one of the largest greenhouse gas emitting projects in Oregon probably soon to be the largest!
- 7) The estimated direct greenhouse gas emissions from the project will result in an annual social cost of up to \$244 million dollars, amounts that do not even take into consideration emissions from gas extraction and the end use combustion of the exported methane.
- 8) To individuals who gain employment from the project, whether temporary or permanent, there are substantial economic benefits. Unfortunately the social global cost of this project is immense, and far exceeds any potential economic value!

**IND188 Continued, page 15 of 16**

IND188-19 Comment noted. See the response to IND1-3.

20150106-0043 FERC.pdf (Unofficial) 1/5/2015

IND188 Continued, page 16 of 16

(pause )

9) *Members of the committee, Attending Oregon Agency representatives, fellow citizens:*  
Please ask yourselves what you will say to your grandchildren when they ask you what  
you did to slow the rate of global warming impacts.

**10) *We urge FERC Commissioners to reconsider the true cost of this project and take into  
consideration its impact on our children and grandchildren.***

(pause)

In closing - As Albert Einstein said "the world will not be destroyed by those who do evil, but  
by those who watch them without doing anything". We urge the Federal Energy Regulatory  
Commission and all Oregon state regulators to *deny granting any and all permissions for  
the Pacific Cove Connector Pipeline to continue.*

20150205-5009 FERC PDF (Unofficial) 2/4/2015 9:24:18 PM

IND189

**IND189 Kelly O’Hanley, Portland, OR**

IND189-1 Comment noted.

Kelly O’Hanley, Portland, OR.  
I hope will understand my biblical reference:

The jobs generated by the LNG facility are the thirty pieces of silver offered to persuade us to betray future generations. If we proceed with this fossil fuel facility and others like it, the problems from climate change will be catastrophic.

IND189-1

Is that silver - namely the welfare of our current generation - worth that level of betrayal?

20150205-5064 FERC PDF (Unofficial) 2/5/2015 11:10:03 AM

IND190

**IND190 Michael Shott, Coos Bay, OR**

IND190-1 Comment noted.

IND190-2 See the comparison in section 3.4.2.2.

Michael Shott, Coos Bay, OR.

I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. So, I believe that Jordan Cove has submitted and complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND190-1

IND190-2

20150211-5262 FERC PDF (Unofficial) 2/11/2015 4:41:14 PM

IND191

Sean Watts, North Bend, OR.

Comment 1: Earthquakes can cause significant subsidence of land in affected areas [addressed in Seismic-related hazards (DEIS 4.2.1.3)]. "Subsidence estimates for the area have been updated as part of the recent tsunami modeling completed for the southern Oregon coast (Witter et al. 2011) and site-specific modeling completed for the Jordan Cove Project (CHE 2013a). These studies indicate the maximum subsidence for the Design Tsunami Earthquake event considered for the LNG terminal project site is on the order of 7.6 feet." (DEIS p. 4-247). Again, not an expert, but 7.6 ft. of subsidence sounds like a lot. Is there an assessment of how this 232 feet long pipeline can handle a subsidence of 7+ feet on its lower end in addition to significant changes in elevation to make it to the coast originally. What if there is not one crack/leak but hundreds? What is the exact plan then?

IND191-1

Comment 2: I would like to see a detailed DEIS for this South Dunes Power Plan that is "out of the jurisdiction" for this EIS "would be an independent power generation system exclusively for the terminal and associated facilities" (DEIS p.2-19). But later in this chapter (2.2.2), the DEIS states, "To provide power to the LNG terminal, Jordan Cove would construct and operate the South Dunes Power Plant" (DEIS 2-76). How about the South Dunes Power Plant substation "which is currently located on the planned South Dunes Power Plant site but is planned to be relocated to a position adjacent to the Jordan Cove meter station" (DEIS p. 2-19). No DEIS for this either? I would not trust this DEIS without being able to see all supporting South Dunes Power Plant DEIS data and analyses at the same time.

IND191-2

Comment 3: EIS Page 3-1 "Jordan Cove's primary objective is to construct and operate a West Coast terminal that can export up to 6 MTPA of LNG to overseas markets. Pacific Connector's primary objective is to transport at least 0.9 Bcf/d of natural gas to the Jordan Cove terminal, from western Canadian and Rocky Mountain sources received at the Malin hub." This is like writing a job description to match the exact skills of the person you want to hire instead of hiring as an equal opportunity employer as required. Of course those proposing the Jordan Cove project are going to write the primary objective so that no other alternatives are remotely possible. Of course they aren't going to consider renewal energy alternatives they are a LNG company. But is this needed or wanted by our community? Does the global energy market necessitate this? Where is there proof of this? In section DEIS 3.2.1 alternatives are given and then the reasons why they are being discarded as alternatives are listed. This is not a thorough analysis of these alternatives but a list of how much less convenient these other sites would be for this company. The Jordan Cove project requires a significant amount of dredging, the construction of 232 miles of new pipeline, and building a new enormous power plant. Are these trivial obstacles on this scale of a project?

IND191-3

Comment 4: Who assesses the public need and how do they assess it? Section 4 (p. 4-163) says "To verify that the Pacific Connector pipeline has a public need, the applicant has applied for a Certificate of Public Convenience and Necessity from the FERC. A FERC Certificate would verify

IND191-4

## IND191 Sean Watts, North Bend, OR

- IND191-1 Seismic effects are discussed in section 4.2.2.2. As stated in that section, welded steel pipes have fared well in earthquakes in California. Also as stated, additional geotechnical studies will be undertaken.
- IND191-2 The power plant is discussed in section 2.2.2. The power plant is not under FREC. As stated in section 1.5.4.2, the facility would be authorized under ODOE-EFSC.
- IND191-3 Jordan Cove has applied to FERC for approval of their proposed project, which is stated in the comment quote. This EIS analyses the environmental effects associated with that proposal. As the comment states, the proposed project does not include producing or exporting renewable energy. The analysis in chapter 3 looks at other locations and alternatives. It finds that one other project could meet the objectives and FERC is analyzing that project in a separate EIS. The need for the Project is not part of the EIS; as stated in section 1.3, the Commission will consider need in a separate analysis.
- IND191-4 As stated in section 1.3, the Commission will consider need in a separate analysis.

20150211-5262 FERC PDF (Unofficial) 2/11/2015 4:41:14 PM

**IND191**      **Continued, page 2 of 2**

that the Project has a public need and provides significant public benefit. Additionally, pursuant to the BLM's right-of-way regulations, the BLM would determine whether the pipeline project is in the public interest." Has the Jordan Cove project successfully received Certificate of Public Convenience and Necessity? I expect the assessment of this need includes highly advertised meetings with the public involved. More information on this on your website is formally requested.

IND191-4  
cont.

Comment 5: The volume of dredging and excavating out of the proposed area is substantial. This will stir up and release heavy loads of suspended particles into Coos Bay. I have a field site at Fossil Pt. (rocky intertidal) that has a high diversity of invertebrates including sponges, bryozoans, nudibranchs, snails, red rock crabs, and (seasonally) breeding kelp crabs among many others. As rocky intertidal species, these will not weather well the heavy sediment loads that are unavoidable with the proposed degree of dredging.

IND191-5

IND191-5      Information on dredging and disposal of dredged material is found in section 2.1.1.12. As noted in section 2.1.1.2, the Port has already obtained an easement for the channel for maintenance and operation. The channel has been dredged for decades. The effects from dredging for this Project are addressed in section 4.4.2.1 and 4.6.2.2.

20150205-5066 FERC PDF (Unofficial) 2/5/2015 11:10:45 AM

IND192

**IND192 Michael Shott, Coos Bay, OR**

IND192-1 Comment noted.

Michael Shott, Coos Bay, OR.  
I have read the draft EIS that FERC has put together on the Jordan Cove Energy Project, I agree with FERC's findings. FERC has looked at every aspect of this project and analyzed each potential issue that may come about during construction as well as after construction is completed. This is a large project and yes it is going to be very evident that something big is going to be coming into our community but as FERC has laid it out there are a lot of steps explained in this document that are going to minimize the damage during construction as well as steps to ensure that everything is put back to as close as natural prior to beginning of project. I would like to ask you to move forward with the permitting process so we can be one step closer to one of the largest things that Coos County has had the opportunity to be a part of in many years.

IND192-1

20150205-5141 FERC PDF (Unofficial) 2/5/2015 2:14:43 PM

IND193

**IND193 Christine Landucci, Bandon, OR**

IND193-1 Comment noted.

IND193-2 See the response to IND1-4.

IND193-3 See the response to IND1-2.

Christine Landucci, Bandon, OR.

I am writing to express my strong opposition to the building of the LNG storage facility and pipeline at Jordan Cove.

I live on the coast in Bandon Oregon and my house is in the tsunami/earthquake evacuation zone.

Our area has been inundated with daily/weekly articles and editorials in our newspaper to convince us to make emergency plans, emergency survival kits for our home and car. Visiting lecturers from major universities speak frequently at our local college and auditorium and have assured us that a major earthquake and tsunami is imminent. I am convinced!

Why why why would we choose to construct a hugely explosive tank of natural gas right on the bay in an area like this? For a few jobs??? I strongly oppose this construction on the basis of it's explosive potential!

There are other important reasons as well:

-the increase of dangerous emissions which will result from the accompanying power plant

-negative impacts on wildlife

-potential for leaks in the pipeline due to stated thinner pipe walls, less frequent leakage checks, etc because we are a "lightly populated" area.

Sincerely

Christine Landucci

Bandon OR

97411

IND193-1

IND193-2

IND193-3



20150205-5154 FERC PDF (Unofficial) 2/5/2015 2:33:44 PM

IND194

**IND194 Doug Viner, Ashland, OR**

IND194-1 With regard to calibration of risk models, there was no mention of pipeline risk models in the DEIS. The EIS describes risk using pipeline operational data maintained by the DOT PHMSA. See section 4.13.9. Pipeline leaks and other accident issues are discussed section 4.13.9.2. Leaks are strongly related to pipeline age. Modern pipeline materials, as well as construction and maintenance standards, are much improved over older materials and methods. The DOT is responsible for enforcing pipeline safety requirements. The FERC does not require that either Jordan Cove or Pacific Connector post bonds. However, Jordan Cove's June 10, 2014 MOU with the ODE requires the posting of a bond to cover retirement costs. Also, both companies would have insurance to cover the unlikely event of an incident. Pipeline accident data is presented in section 4.13.9.2. The FERC does not have an "Acceptable failure rate", as safety is paramount. While we cannot say that any project is certain to be perfect, there are hundreds of thousands of miles of high pressure natural gas pipes which operate safely every day, and have for decades.

Doug Viner, Ashland, OR.

A question of proper calibration of the risk analysis models used for this project:

In light of the many documented leaks from our nation's existing pipelines into its rivers and tributaries, I wonder how it can be that the risk from this pipeline - which is proposed to transport a rather nasty substance - can be judged to be acceptable. It is reasonable to expect that the Draft EIS has considered this question and is prepared to answer some reasonable questions about it.

Here are some salient, technical questions which should be answered before this EIS is approved:

1. Calibration of risk models - Are the risk models calibrated against existing pipelines which carry similar substances and are known to have leaked? That is:
  - a. Has the salient data from a set of "existing pipelines which have leaked" been entered into the model which was used for the Pacific Connector?
  - b. Did the model predict that those other pipelines would fail?
    - i. If so, what will be different about this pipeline in its design, maintenance, and legal oversight to ensure that it will not fail at any of its length, let alone its many crossings of sensitive areas and water bodies?
    - ii. If not, how can the models be correct?
2. Comparison of pipelines - In what ways will this pipeline be safer than those that have produced significant leaks?
3. Safety assurance and enforcement -
  - a. What assurances does the applicant provide that the safety measures will be carried out?
  - b. What financial insurance does the applicant provide to offset the risk to the public and the environment? In considering this, it is relevant to note that:
    - i. Historically, company's promises without money to back it up are often proven to be empty (without merit).
    - ii. Historically, pipeline health & safety enforcement efforts have recently been shown to be woefully inadequate.
4. Acceptable failure rate -
  - a. What is the acceptable failure rate?
  - b. With what certainty is this failure rate predicted to be correct?

These relevant questions which should be answered and published before this EIS is approved, not afterward.

Sincerely,  
Doug Viner

IND194-1

20150205-5179 FERC PDF (Unofficial) 2/5/2015 3:12:35 PM

IND195

**IND195 Chris Peach, Roseburg, OR**

IND195-1 Comment noted.

IND195-2 Comment noted. See the comparison in section 3.4.2.2.

Chris Peach, Roseburg, OR.  
I have reviewed the Draft Environmental Impact Statement and concur with FERC's findings. As with any project, the community and environment will be affected to a certain degree. The mitigation measures Jordan Cove Energy (JCE) has proposed and/or agreed to incorporate into both the short and long term construction/operation of these facilities drastically reduces these adversities. In reviewing this document it is evident that both FERC and JCE have gone above and beyond in ensuring this project will be a success to all parties involved. I ask that FERC proceed with the permitting process to grant JCE their permit for this project. I also urge you to review the alternate Blue Ridge Route for the pipeline. Although both are viable options, it appears that the Blue Ridge Route would be a more suitable region, as it affects less private parcels, and above all greater public safety both during construction and operation.

IND195-1

IND195-2

20150205-5181 FERC PDF (Unofficial) 2/5/2015 3:37:34 PM

IND196

**IND196 Jim L. Tucker, Coos Bay, OR**

IND196-1 Comment noted.

IND196-2 Comment noted. See the comparison in section 3.4.2.2.

Jim L Tucker, Coos Bay, OR.  
I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. I believe that Jordan Cove has submitted a complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND196-1

IND196-2

20150205-5182 FERC PDF (Unofficial) 2/5/2015 3:39:40 PM

IND197

**IND197 Jim L. Tucker, Coos Bay, OR**

IND197-1 Comment noted.

Jim L Tucker, Coos Bay, OR.  
I have read the draft EIS that FERC has put together on the Jordan Cove Energy Project, I agree with FERC's findings. FERC has looked at every aspect of this project and analyzed each potential issue that may come about during construction as well as after construction is completed. This is a large project and yes it is going to be very evident that something big is going to be coming into our community but as FERC has laid it out, there are a lot of steps explained in this document that are going minimize the damage during construction as well as steps to ensure that everything is put back to as close as natural prior to beginning the project. I would like to ask you to move forward with the permitting process so we can be one step closer to one of the largest things that Coos County has had the opportunity to be a part of in many years

IND197-1

20150205-5184 FERC PDF (Unofficial) 2/5/2015 3:50:49 PM

IND198

Michael j McCumiskey, coos bay, OR.  
I have read the Draft EIS and agree with FERC's findings on the project.  
By following the Rules & Regulations put in place by Federal, State,  
County, and City governments to minimize impacts to wetlands; vegetation;  
wildlife; fisheries; environmental resources; special status species;  
recreation and visual resources; socioeconomic; cultural resources; air  
quality; noise; and safety makes this project possible with minimal  
environmental impacts. This is no different than hundreds of projects  
around the state that deal with the same impacts each day and by  
following the Rules & Regulation of the permits obtained along with the  
proper monitoring and reporting, they make minimal environmental impacts.  
I believe that Jordan Cove has submitted a complete and valid Draft EIS  
and I ask that the permitting process move forward; and the project be  
approved. I also recommend that you take a look at the "Blue Ridge" pipe  
line route which would impact less private citizens along the pipe line  
and could be a valid route creating greater public safety along this  
section of the pipe line route.

IND198-1

IND198-2

**IND198 Michael J. McCumiskey, Coos Bay, OR**

IND198-1 Comment noted.

IND198-2 Comment noted. See the comparison in section 3.4.2.2.

20150205-5185 FERC PDF (Unofficial) 2/5/2015 3:54:04 PM

IND199

**IND199 Michael J. McCumiskey, Coos Bay, OR**

IND199-1 Comment noted.

IND199-2 Comment noted. See the comparison in section 3.4.2.2.

Michael j McCumiskey, coos bay, OR.  
I have reviewed the Draft Environmental Impact Statement and concur with FERC's findings. As with any project, the community and environment will be affected to a certain degree. The mitigation measures Jordan Cove Energy (JCE) has proposed and/or agreed to incorporate into both the short and long term construction/operation of these facilities drastically reduces these adversities. In reviewing this document it is evident that both FERC and JCE have gone above and beyond in ensuring this project will be a success to all parties involved. I ask that FERC proceed with the permitting process to grant JCE their permit for this project. I also urge you to review the alternate Blue Ridge Route for the pipeline. Although both are viable options, it appears that the Blue Ridge Route would be a more suitable region, as it affects less private parcels, and above all greater public safety both during construction and operation.

IND199-1

IND199-2

20150206-5001 FERC PDF (Unofficial) 2/5/2015 5:30:05 PM

IND200

**IND200     Beth Gipson, North Bend, OR**

IND200-1     Comment noted.

Beth Gipson, North Bend, OR.  
I have read the draft EIS that FERC has put together on the Jordan Cove Energy Project, I agree with FERC's findings. FERC has looked at every aspect of this project and analyzed each potential issue that may come about during construction as well as after construction is completed. This is a large project and yes it is going to be very evident that something big is going to be coming into our community but as FERC has laid it out, there are a lot of steps explained in this document that are going minimize the damage during construction as well as steps to ensure that everything is put back to as close as natural prior to beginning the project. I would like to ask you to move forward with the permitting process so we can be one step closer to one of the largest things that Coos County has had the opportunity to be a part of in many years.

IND200-1

20150206-5002 FERC PDF (Unofficial) 2/5/2015 5:31:22 PM

IND201

**IND201 Beth Gipson, North Bend, OR**

IND201-1 Comment noted.

IND201-2 Comment noted. See the comparison in section 3.4.2.2.

Beth Gipson, North Bend, OR.  
I have reviewed the Draft Environmental Impact Statement and concur with FERC's findings. As with any project, the community and environment will be affected to a certain degree. The mitigation measures Jordan Cove Energy (JCE) has proposed and/or agreed to incorporate into both the short and long term construction/operation of these facilities drastically reduces these adversities. In reviewing this document it is evident that both FERC and JCE have gone above and beyond in ensuring this project will be a success to all parties involved. I ask that FERC proceed with the permitting process to grant JCE their permit for this project. I also urge you to review the alternate Blue Ridge Route for the pipeline. Although both are viable options, it appears that the Blue Ridge Route would be a more suitable region, as it affects less private parcels, and above all greater public safety both during construction and operation.

IND201-1

IND201-2



20150206-5003 FERC PDF (Unofficial) 2/5/2015 5:52:04 PM

IND202

**IND202 Angela van Patten, Portland, OR**

Angela van Patten, Portland, OR.  
Dear Commissioners,

In approximately 5,000 pages, the draft environmental impact studies for the Jordan Cove LNG Terminal and the associated Pacific Connector Pipeline failed to give adequate consideration to many grave environmental threats posed by these proposals.

In particular, the Jordan Cove LNG Terminal and Pipeline draft EIS study failed to consider this project's contribution to our immediate climate change problem. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider how this massive fossil fuel project could possibly fit into that reduction, or if it would be a significant force in tipping us over into unlivable climate change.

IND202-1

As you know, natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing LNG. This methane is an 86 times more potent greenhouse gas than burning coal.

Other environmental threats posed by this project include fracking; vast, toxic destruction should the terminal or pipeline be impacted by a large earthquake or tsunami; and habitat destruction.

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking operations. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on the environment.

IND202-2

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what would happen to the two 80-million-gallon tanks of liquified natural gas if the power stopped working and the back-up power also failed, as it did in Fukushima, Japan. The LNG would immediately start to warm and expand. How big and how toxic would the blast zone be?

IND202-3

As a final consideration in this comment, please note that this project will clearcut a nearly 100-ft. wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which has been reserved for imperiled wildlife. Over 400 waterways will have their stream-side (riparian) vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife which depend on these forests and streams, such as the spotted owl, marbled murrelet, and coho salmon.

IND202-4

Thank you for considering these and many more omissions of the draft environmental impact report for this project. FERC should extend the comment period by at least 30 days to give all concerned Oregonians a chance to learn what is contained in the 5,000+ page DEIS and to make appropriate comments to the Commission.

IND202-5

- IND202-1 See the response to IND1-1.
- IND202-2 See the response to IND1-3.
- IND202-3 See the response to IND1-4.
- IND202-4 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.
- IND202-5 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150206-5008 FERC PDF (Unofficial) 2/5/2015 9:52:58 PM

IND203

**IND203     Matthew Goergen, Coos Bay, OR**

IND203-1     Comment noted.

IND203-2     Comment noted.

matthew Goergen, coos bay, OR.  
I HAVE LIVED IN COOS BAY FOR OVER 25 YEARS . I AM FULLY SUPPORTING THE  
LNG EXPORTING FACILITY. PLEASE APPROVE ALL PERMITS TO BEGIN THE BUILDING  
OF THIS LNG FACILITY. COOS BAY AND THE ENTIRE REGION DESPERATELY NEEDS  
THIS PROJECT! THANK YOU. MATT GOERGEN

| IND203-1  
| IND203-2

20150206-5013 FERC PDF (Unofficial) 2/6/2015 2:16:51 AM

IND204

**IND204 Carol N. Doty, Medford, OR**

Carol N Doty, Medford, OR.

**INTRODUCTION:**

Jordan Cove proposes to export up to one billion cubic feet of fracked gas per day from Coos Bay. Required to do so requires construction of a new 420-megawatt power plant used solely to liquefy the gas for transport on tankers, an extensive network of gas storage tanks, and a large shipping terminal within the tsunami zone on the north spit of Coos Bay. The Pacific Connector pipeline that Jordan Cove wants to build to supply this terminal would transport 1.2 billion cubic feet of gas per day from Klamath Falls to Coos Bay, using gas supplied from the interior west and Canada.

I am not a native Oregonian, but I've lived in Oregon most of my adult life and I choose to live here because of the natural environmental amenities that this state offers its residents and visitors. The proponents of the Jordan Cove Liquefaction and Pacific Connector Pipeline projects as well as the Federal Energy Regulatory Commission (FERC) do not hold the best interests of Oregon and Southern Oregonians in their sights, at least not yet.

**PROponents AND FERC FAIL TO ADDRESS GLOBAL WARMING IMPACTS:**

Proponents have failed to adequately address the negative impacts of this project of greenhouse gas pollution on global warming and climate change. FERC has failed in its responsibility to assess global impacts of this project. While the agency indicates that it "should assess the potential direct, indirect and cumulative impacts of the project on the natural and human environment," it has not done so. And it certainly has not complied with the goal of the National Clean Energy Policy, "to move to clean energy as quickly as possible."

Alan Journet's Guest Opinion posted in the Mail Tribune on 1/11/15 is quoted:

Curiously FERC does consider-but immediately dismisses-the impact of the project on fossil fuel extraction by claiming that increased natural gas extraction is not a "reasonably foreseeable" consequence of the Project. This claim is indefensible since the Department of Energy (Order 3413) granting export authority to Jordan Cove) reported: "According to Jordan Cove, this ...[project]...will support increased production of natural gas from shale formations."

This new pipeline would cross 230 miles of public and private land, creating a 95-foot

IND204-1

IND204-2

IND204-3

IND204-1 See the response to IND1-1.

IND204-2 Comment noted. See the response to IND1-3.

IND204-3 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.

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permanent clearcut and cross 400 streams and rivers in the Klamath, Rogue, Umpqua, Coquille and Coos watersheds. Such action would require extensive riparian cutting, resulting in increased water temperatures in streams that already violate temperature standards for salmon and other cold-water fish. Yet, FERC's evaluation did not include site-specific impacts analysis or crossing plans for any of the sub-watersheds that will be affected. The inadequacy of the energy company's crossing plans for the Rogue River was recognized by the Oregon Department of Fish and Wildlife, but the company ignored them, and FERC approved their plans without requiring additional analyses.

IND204-3  
conf'd

OTHER SPECIFIC ISSUES INADEQUATELY ADDRESSED:

1. Impact on major and famous wild fishing rivers: the Rogue and the Klamath. They are barely mentioned but Southern Oregon relies on them for significant economic benefits (also not addressed).
2. Impact on wild salmon runs, relied upon for food, recreation, and tourism—all related to the Southern Oregon economy, especially

IND204-4

- + threatened Coho salmon on the Southern Oregon and Northern California Coasts, and
- + threatened Coho salmon of the Oregon Coast Evolutionarily Significant Units

Also of importance are the endangered Lost River sucker, the endangered Shortnose sucker, and the threatened vernal pool fairy shrimp.

IND204-5

3. The plant is being located in a tsunami/earthquake zone, and the pipeline is to be placed in earthquake prone areas, not mentioned in the EIS.

IND204-6

Through consultations with DOGAMI, proponents identified 11 faults located within 93 miles of the Jordan Cove terminal, "of which the Cascade Subduction Zone (CSZ) is the most important. ... A tsunami generated by a megathrust earthquake on the CSZ would present the greatest inundation risk at the Jordan Cove terminal. Jordan Cove has designed the LNG terminal so that foundations "would be above the run-up height of the worst-case tsunami wave, and the LNG storage tanks would be surrounded by a storm surge barrier with a peak crest elevation of + 60 feet." Narrative indicates the storage tanks will be 180 feet high, quite a spectacle in the wetland. 5.1.2

While I have concerns about Klamath County's Tule Lake wildlife area, I also have serious concerns are about the potential lateral spreading of gas "at seven sites (Haynes Inlet, Kentuck Slough, Willanch Slough, Coos River, Willis Creek, Rogue River, and Klamath River) along the pipeline route. Pacific Connector would conduct numerical modeling for these sites prior to construction to estimate the magnitude of liquefaction-induced settlement and lateral spreading that would be expected during an earthquake. If the studies indicate that an earthquake may result in excessive pipe stress, further mitigation design would be needed,

IND204-7

**IND204 Continued, page 2 of 3**

IND204-4 FERC has not approved any crossing plans for this Project. An EIS is not a decision document. The DEIS discusses the crossing options in section 4.4.2.2 and effects on fish from waterbody crossings in section 4.6.2.3. The crossing plan is included in Appendix 2G to Resource Report 2 of Pacific Connector's June 6, 2013 application with the FERC. The entire application is available in electronic format for public viewing via the internet on the FERC webpage ([www.ferc.gov](http://www.ferc.gov)) through our eLibrary system. Also see the HDD Contingency Plan was attached as Appendix 2H to Resource Report 2.

IND204-5 Effects on salmon are discussed in section 4.7.1.3 and in section 4.6.2.3.

IND204-6 The DEIS discusses seismic risks associated with the LNG terminal in section 4.2.1.3 and seismic risks associated with the pipeline in 4.2.2.2.

IND204-7 Lateral spreading potential is discussed in section 4.2.2.2. The commenter is correct, as indicated in the section on lateral spreading, additional studies will be performed. For any location where the pipeline would be subject to excessive stresses during a seismic event, measures would be implemented to protect the pipeline. A pipeline engineering firm would be engaged to evaluate and design protective measures.

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including deeper burial below the liquefiable soils, thicker pipe and/or weighting the pipe with a concrete coating." 5.1.2  
I oppose construction of the pipeline, based on recent news reports of broken gas and oil lines, resulting in leaks and explosions throughout the US. If construction is approved, FERC must require that DOGAMI and DEQ be engaged to evaluate all of the studies and preparations made by Pacific Connector in earthquake and lateral spreading potential areas. One comment, "a moderate-risk rapidly moving landslide site could not be avoided at MP 3619 on BLM Coos District land," causes further concern that Oregon's regulatory age

IND204-7  
Cont.  
IND204-8  
IND204-9  
IND204-10

**IND204 Continued, page 3 of 3**

- IND204-8 Comment noted. Also see the response to IND1-2.  
IND204-9 Comment noted.  
IND204-10 Comment noted.

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IND205

**IND205 Jerry Havens, University of Arkansas and James Venart,  
University of New Brunswick**

IND205-1 See responses to IND107-15, -28, and -30.

Submitted by  
Jerry Havens  
Distinguished Professor of Chemical Engineering  
University of Arkansas  
James Venart  
Professor Emeritus of Mechanical Engineering  
University of New Brunswick

Regarding the  
Jordan Cove Export Terminal  
Draft Environmental Impact Statement  
Docket No. CP13-483

February 6, 2015

This comment, intended to supplement our comments filed January 14, 2015, is directed to the further quantification of the hazards of unconfined vapor cloud explosions that could possibly follow the JCE DEIS illustrated design spills of mixed refrigerant liquids and ethylene; specifically to the determination by mathematical model prediction of the damaging overpressures that could result. We are concerned that the potential for damage is being seriously underestimated. As in our earlier comments, for brevity we have selected two representative design spill vapor cloud illustrations; one for mixed refrigerant and one for ethylene.

IND205-1

**Unconfined Vapor Cloud Explosion hazard of mixed refrigerant liquids**

Figure 4.13-10 in the JCE DEIS depicts the area covered by the mixed refrigerant (MR) vapor cloud formed from the design spill from the refrigerant pump discharge piping.



Figure 4.13-10. Mixed Refrigerant Release from Rupture of the Pump Discharge Piping

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IND205 Continued, page 2 of 5

IND205-2 See response to IND107-30.

The area covered by the vapor cloud is estimated to be approximately 400 meters wide and 720 meters long. We estimate the cloud would be between 2 and 4 meters deep with a lateral area of 288,000 m<sup>2</sup>. The cloud envelops large portions of the liquefaction trains as well as at least half of the LNG shipping berth, including the important partial-explosion-confinement space between the ship-side and the dockside.

#### Unconfined Vapor Cloud Explosion hazard of ethylene

Figure 4.13-13 in the JCE DEIS depicts the area covered by the ethylene vapor cloud formed from the design spill from a ruptured ethylene trucking hose. The area covered by the cloud is estimated to be approximately 320 meters wide and 400 meters long. We estimate this cloud to be between 2 and 4 meters deep with a lateral area of 128,000 m<sup>2</sup>. The cloud envelops large portions of the liquefaction trains as well as all of one of the LNG tanks and about 2/3 of the other one.



Figure 4.13-13. Ethylene Release from Rupture of the Ethylene Trucking Hose

#### Overpressure Analyses presented in the DEIS

The DEIS at page 4-963 states: "... the propensity of a vapor cloud to detonate or produce damaging overpressures is influenced by the reactivity of the material, the level of confinement and congestion surrounding and within the vapor cloud, and the flame travel distance." We added (in our comments of January 14) that the potential flame travel distance is the distance that can be traversed by the flame in gas/air concentrations lying within the flammable region, i.e., between the LFL and UFL. This is important because it indicates the importance of the size of the vapor cloud; if a very large vapor cloud forms with large (lateral) distances that can be traversed by a flame burning in the flammable region, the potential for flame acceleration, which can lead to damaging overpressures, increases.

The JCE DEIS appears to conclude that the potential explosion overpressures resulting from the design spills of mixed refrigerants (propane, pentane, and ethylene) will not pose a hazard to the public. The basis for those conclusions appears to be the overpressure plots presented for the design spills. It appears that the overpressure plots were prepared with the FLACS computer

IND205-2

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IND205 Continued, page 3 of 5

IND205-3 See response to IND107-30.

model which is approved by DOT under 49 CFR 193 for determination of the extent of the flammable vapor dispersion exclusion zones for the design spills. Plots of overpressure are shown for four mixed refrigerant design spills (See typical example - Figure 4.13-15 below). There are regions in all of the mixed refrigerant spill plots with linear dimensions of approximately 100 meters where the calculated overpressures exceed 2.5 psig, but there is no specification of the maximum pressures reached. It appears that these overpressures (~2.5 psig) are considered by FERC to be sufficiently low as not to pose a hazard to the public. Although the DEIS acknowledges the potential for ethylene vapor clouds to detonate, no overpressure predictions are provided for the ethylene design spill scenario (Figure 4.13-13 shown earlier).

IND205-2  
continued

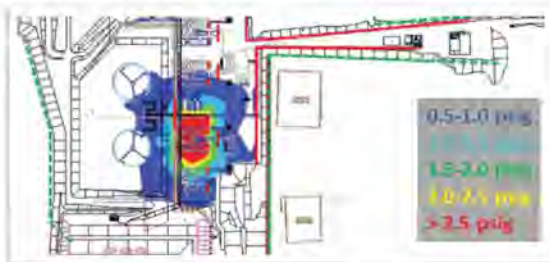


Figure 4.13-15. MR Overpressure Scenario at Train 2

The mixed refrigerant spill overpressure calculations are also stated to indicate approximately 2.3 psig overpressure at the LNG storage tanks. This statement is then followed by "Jordan Cove stated that the LNG storage tanks would be designed to withstand an overpressure of 2.3 psig"... and that "We (presumably FERC) conclude that the siting of the proposed Project would not have a significant impact on public safety". As we stated in our comments filed January 14, in our opinion this statement assumes a precision and accuracy of the model predictions for which there is no supporting evidence.

IND205-3

#### Recent Evidence of factor-of-ten greater UVCE overpressures: Research post-Buncefield

During the decade 2005-2015 since the Buncefield explosion occurred there have been published extensive reports of analyses thereof. The Buncefield explosion, which has been definitely established to be a UVCE, is thought to be the largest explosion that has occurred in peacetime Europe; damages now exceed two billion dollars.

There is an extensive literature on the investigation of the Buncefield explosion and the research programs and regulatory decision-making that followed. We do not have time or space here to do more than describe briefly the results of key research completed since Buncefield (2005) in the area of prediction of overpressures resulting from unconfined vapor cloud explosions of hydrocarbons similar to the mixed refrigerant clouds, including ethylene, considered in the JCE DEIS.



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IND205 Continued, page 4 of 5

We believe the following facts can be substantiated for consideration of the explosion (overpressure) hazards that could follow ignition of the refrigerant (heavier than methane hydrocarbon) clouds illustrated in the JCE DEIS:

- Numerous vapor clouds of MR gas predicted by the FLACS dispersion code for design spills in the DEIS are of similar size and shape (pancake with comparable depth and lateral area) to the Buncefield cloud, for which the lateral area is estimated to be 200,000 m<sup>2</sup>.
- Hydrocarbon concentrations assumed in the simulations of Buncefield using the FLACS<sup>1</sup> and EXSIM<sup>2</sup> codes are characterized as Propane or Butane, well mixed with stoichiometric amounts of air. The reactivity of the hydrocarbon gases composing the DEIS design spill clouds is then comparable (but clearly exceeded for ethylene) to the reactivity of the clouds assumed in FLACS and EXSIM for Buncefield in published predictions.
- Both FLACS and EXSIM are reported to produce pressures exceeding 200 kPa (approximately 30 psig, more than ten times higher than cited in the JCE DEIS) over large areas at Buncefield. FLACS represents the tree-line congestion present at Buncefield as (numerical) “tree-like” congestion while EXSIM represents the congestion effect of the trees with models of plant piping structures. The high overpressures predicted by both codes strongly suggest that the high overpressures result from the congestion effects causing flame acceleration.

Research into the Buncefield Explosion Mechanism is continuing in a joint industry project (Buncefield Phase 2)<sup>3</sup>. That research involves large scale experiment explosion testing as well as continuing utilization of computational fluid dynamics (CFD) modeling. We quote the abstract of Pekalski, et al's paper:

*“The paper reviews large scale experiments with various fuels in air where successful deflagration to detonation transition (DDT) took place. This includes a recent experiment disclosed in the Buncefield R&D program, where DDT developed in the propane/air mixture. The DDT occurred in branches of deciduous trees in a premixed stagnant mixture. An internal R&D investigation programme was initiated to better understand the phenomena. A large scale experiment in an open space with ethane air mixture is presented in the paper. The premixed mixture was ignited at the edge of the congested three dimensional rigs which consisted of vertical and horizontal pipes. After ignition, the flame accelerated in the congestion and transitioned to detonation at the end of congestion. Stable detonation propagated through the remaining open and uncongested space. The flame acceleration process leading to DDT is scale dependent. It also depends on many parameters leading to a large investigation array and, significant cost. However, such R&D efforts aimed toward a safer plant design, i.e. the prevention of occurrence of a major accident, are a small fraction of a real accident cost”.*

<sup>1</sup> Davis, Scott G. et al, Investigation Techniques used to Determine the Massive Vapor Cloud Explosion at the Buncefield Fuel Depot. [www.gexcon.com/images/docs/trees-4lexCon.pdf](http://www.gexcon.com/images/docs/trees-4lexCon.pdf)

<sup>2</sup> Buncefield Explosion Mechanism – Phase 1, Volumes 1 and 2, UK Health and Safety Executive Research Report RR718, Prepared by the Steel Construction Institute for the Health and Safety Executive, 2009.

<sup>3</sup> Pekalski, Andrzej, et al., DDT in a vapour cloud explosion in unconfined and congested space; large scale test, Tenth International Symposium on Hazards, Prevention, and Mitigation of Industrial Explosions, Bergen, Norway, 10-14, June 2014.

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In view of the evidence in the last decade from Buncefield, UK; Anuay, Venezuela; Jaipur, India; and San Juan, Puerto Rico, of unexpected unconfined vapor cloud explosions of hydrocarbon clouds with similarities (specified above) to the flammable clouds presented for the design spills in the JCE DEIS, we respectfully request additional information about the overpressure calculations using FLACS in the JCE DEIS, for which the calculated overpressures were limited to levels of approximately 2 psig, or an order of magnitude lower than published predictions using FLACS for Buncefield).

- Please provide a statement of the extent to which DOT/PHMSA included in its evaluation of FLACS as an alternate method (to DEGADIS and FEM3A) for determining vapor cloud exclusion zones any evaluation performed of the accuracy/applicability of the FLACS code to the simulation of the Buncefield explosion or to any other applicable documented UVCE experience, as a condition for its acceptance for explosion overpressure prediction under the requirements of 49 CFR 193.
- Please provide a description of the gas assumed to represent the mixed refrigerant design spill(s), and the concentration of such gas or gas mixtures that is assumed for the vapor cloud at the instant of ignition and the locations of same. If the concentration throughout the cloud is assumed to be that associated with the FLACS prediction of the vapor cloud extent shown in the "dispersion" illustrations, please state the range of concentrations existing in the cloud at that time.
- Please provide a description of any overpressure calculations performed for the ethylene spill.
- Please provide a description of any provision in the FLACS code predictions for the JCE DEIS for flame speed enhancements caused by congestion due to the plant/piping structures in the JCE facility.
- Please provide a description of any provision for the effect upon explosion that could result from the partial confinement of the cloud by the extensive vapor fencing utilized to limit the vapor cloud exclusion zones.

IND205-4

**IND205 Continued, page 5 of 5**

- IND205-4 See response to IND107-4 for the evaluation of FLACS. Also, FERC staff verified the composition of the mixed refrigerant used in the hazard analyses to be consistent with the proposed design. See response to IND107-30 for the discussion of overpressure due to the explosion of the ethylene vapor cloud. Flame acceleration is based upon turbulence caused by congestion. Sub-grid objects are resolved using a Porosity-Distributed Resistance (PDR) methodology that calculates flow resistance terms, turbulence generation/source terms, and flame acceleration terms based on flame wrinkling/folding in the sub-grid wake. The flame folding parameter is important for explosion calculations and is validated based on experimental observations for explosion scenarios. See response to IND107-24 regarding the overpressure due to the possible confinement of vapor fences.

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IND206

Ed Cooley, Elkton, OR.

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems.

IND206-1

The Jordan Cove LNG Terminal and Pipeline are subject to earthquakes and tsunamis.

Leaking methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider this climate impact of LNG.

Fracking damages the environment. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

IND206-2

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

IND206-3

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

IND206-4

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

IND206-5

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND206-6

## IND206 Ed Cooley, Elkton, OR

IND206-1 See the response to IND1-1.

IND206-2 See the response to IND1-3.

IND206-3 See the response to IND1-5.

IND206-4 See the response to IND1-7.

IND206-5 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.

IND206-6 FERC has not approved any crossing plans for this Project. An EIS is not a decision document. The DEIS discusses the crossing options in section 4.4.2.2 and effects on fish from waterbody crossings in section 4.6.2.3. The crossing plan is included in Appendix 2G to Resource Report 2 of Pacific Connector's June 6, 2013 application with the FERC. The entire application is available in electronic format for public viewing via the internet on the FERC webpage ([www.ferc.gov](http://www.ferc.gov)) through our eLibrary system. Also see the HDD Contingency Plan was attached as Appendix 2H to Resource Report 2.

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IND207

**IND207 Rudy, Roseburg, OR**

IND207-1 Comment noted.

IND207-2 Comment noted. See the discussion of the Blue Ridge route alternatives in section 3.4.2.2.

Rudy, Roseburg, OR.  
I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. I believe that Jordan Cove has submitted a complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND207-1

IND207-2

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IND208

Janis Lloyd, North Bend, OR.  
Janis W. Lloyd 68797 Ridge Rd, North Bend, OR 97459  
(541)751-0802

Kimberly D. Rose, Secretary  
FERC  
888 First Street NE, Room 1A  
Washington DC 20426

02/11/2015  
Docket Numbers CP13-483-000 and CP13-492-000  
Comments on Draft EIS for Jordan Cove Project

1. The Jordan Cove DEIS is far too large for the public to adequately review. Normally, it should be no longer than 300 pages. It exceeds the recommended length for an EIS of unusual scope or complexity by thousands of pages. It is designed to discourage the public to respond with comments. It is justifying a decision that has already been made, which is to approve the Jordan Cove Project, in direct violation of 40 CFR 1502.5.

IND208-1

2. The DEIS is not an objective analysis. It is a full disclosure document on the proposed action which is a direct violation of 40 CFR 1502.1.

IND208-2

3. The purpose and needs statement is inadequate to serve as the starting point for an EIS of this scope. The need for this project is defined by the applicant Jordan Cove to serve the robust international demand for natural gas by exporting competitively priced natural gas from Canadian and Rocky Mountain sources. This is not a valid need meeting the broader public interests. FERC should have considered the cumulative impacts of fracking. The Jordan Cove project would release 2.1 million tons of greenhouse gases annually, making it the second-largest source of greenhouse gas in Oregon. These cumulative effects need to be addressed.

IND208-3

IND208-4

4. There are no alternatives that are evaluated for this project, which is required by NEPA. FERC has 14 proposals for LNG terminals. Thirteen of these can use existing infrastructure, except for Jordan Cove. These should be evaluated as reasonable alternatives that are practical or feasible. Jordan Cove also requires use of Eminent Domain. Private property for the benefit of a foreign energy company is not a proper use of Eminent Domain.

IND208-5

IND208-6

5. Jordan Cove is in an identified plate tectonics hazard zone. The earthquake subduction zone and tsunami area of Coos Bay is not adequately addressed. The document needs to address the consequences of the two 80-million gallon tanks of liquefied natural gas if the power plant stopped working and backup power did not work (as happened in Fukushima, Japan).

IND208-7

6. The Affected Environment Chapter is inadequate. A current baseline is needed that describes the current conditions of the Coos Bay Estuary, as well as the 300 stream crossings for pipeline construction. The 36"

IND208-8

## IND208

## Janis Lloyd, North Bend, OR

- IND208-1 The EIS considers the LNG facility, a 230-mile natural gas pipeline, and amendments to BLM and National Forest management plans. These are connected actions; therefore, they are considered in one EIS rather than three shorter EISs. No decision has been made yet. The EIS complies with 40 CFR 1502."
- IND208-2 The DEIS is a science-based document that summarizes years of studies and considers the extensive research on fish, riparian habitat, streams and water quality. The fifth-field watershed is commonly used in the Pacific Northwest for analyzing project effects. Watershed analyses for fifth-field watersheds completed by federal agencies are a key component of managing federal lands under the Northwest Forest Plan and provide a good basis for an analysis of effects. Mitigation measures are included to reduce runoff from hillslope areas. The Project includes monitoring (table 2.5.2-1). Higher-risk stream crossings would have addition monitoring and mitigating (see section 4.6.2.3) and the extensive compensatory mitigation in table 2.1.4-1). Additional monitoring would be required by ODFW under its permitting process.
- IND208-3 This DEIS considers the environmental effects from the Project. The Commission will evaluate the need for the Project in a separate analysis. See section 1.3.
- IND208-4 See the response to IND1-3.
- IND208-5 Alternatives are analyzed in chapter 3.
- IND208-6 See the response to IND1-5.
- IND208-7 Please see the extensive analysis of LNG facility hazards, including loss of power, in section 4.13.2, engineering design in section 4.13.3, the vapor dispersion analysis in section 4.13.5.3, and the overpressure analysis in section 4.13.5.4.
- IND208-8 While there are no headings that say Affected Environment or Current Conditions, the current conditions are discussed at considerable length for each resource in chapter 4. For example see the discussion on upland vegetation conditions on pages 4-28 to 4-48. Also, Resource Report 2 filed with FERC on February 6, 2013 and available on eLibrary, describes the water quality and dredge material studies. The appendices to this report present the sampling details and results.

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pipeline construction and the 230 mile linear clearcut needs to be addressed. To eliminate this section of the Affected Environment is a violation of the NEPA regulations at 40 CFR 1502.15 and does not include the recommendations of the Environmental Protection Agency.

IND208-8  
cont.

7. The Environmental Consequences section is flawed. Scientific and analytic basis for the comparison of the proposed action and all reasonable alternatives must be provided. Where is the information on the ports considered, assessment of the baseline environmental conditions, criteria used, and what were the environmental factors?

IND208-9

8. There is a proposal for an offshore wind power generating facility proposed by Principle Power. They state that Jordan Cove would provide a suitable market for the location of the wind power terminal at Coos Bay. This related facility should be addressed in the Jordan Cove DEIS.

IND208-10

9. The affects on the North Bend Airport are not adequately addressed. The FAA has not formally reviewed the Jordan Cove proposal, however, FERC states that "the Jordan Cove project would have negligible impacts on air traffic...". FERC basically says it will approve the Jordan Cove project without input with the FAA.

IND208-11

10. A Jordan Cove Worker Camp is proposed, but not addressed, in this flawed DEIS. The camp proposes adding 2,100 people to the City of North Bend. This is more than a 20% increase in the North Bend population. It is located within the tsunami zone and would have a large impact on the traffic and local businesses.

IND208-12

11. The Jordan Cove draft DEIS does not include the information and analyses required to write a Record of Decision. This is violation of the NEPA regulations.

IND208-13

IN CONCLUSION, THE DRAFT DEIS IS FLAWED AND DOES NOT MEET THE INTENT OF THE NATIONAL ENVIRONMENTAL POLICY ACT. PER 40 CFR 1502.9 (a) THE DEIS MUST FULFILL AND SATISFY TO THE FULLEST EXTENT POSSIBLE THE REQUIREMENTS ESTABLISHED FOR FINAL STATEMENTS IN SECTION 102 (C). IF A DEIS IS SO INADEQUATE AS TO PRECLUDE A MEANINGFUL ANALYSIS, THE AGENCY SHALL PREPARE AND CIRCULATE A REVISED DEIS.  
Sincerely,

/s/ Janis Lloyd  
JANIS LLOYD

## IND208 Continued, page 2 of 2

- IND208-9 Alternatives are evaluated in chapter 3, and the Project effects in chapter 4. This DEIS follows the standard FERC format.
- IND208-10 This possible future project is discussed in section 4.14. See table 4.14.2.3-1.
- IND208-11 Our analysis of potential Project-related impacts on the Southwest Oregon Regional Airport in North Bend can be found in section 4.10.1.4 of the DEIS. In their December 17, 2009 Order Granting Authorizations under Section 3 of the Natural Gas Act and Issuing Certificates for the original Jordan Cove LNG import proposal in Docket No. CP07-444-000, the other four sitting Commissioners disagreed with and overruled Mr. Wellenhorst's dissent. In a letter to the Commission dated December 22, 2014, commenting on our November 2014 DEIS for this Project, the Southwest Oregon Regional Airport and Coos County Airport District stated that it "strongly concurs with (the) recommendation (in the DEIS for Jordan Cove to document consultations with the Federal Aviation Administration [FAA] and submit the results of studies before Project construction) and believes that the FAA process will assure that the Airport continues to operate safely and efficiently."
- IND208-12 The proposed camp (North Point Workforce Housing Complex) is addressed in section 4.9.1.2. The camp would have room for 2,100 employees.
- IND208-13 FERC does not prepare a record of decision. The Commission will consider whether to authorize the Project in its Public Order; see section 1.3. The Commission will consider the FEIS and other analyses in making its decision.

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IND209

**IND209     Denny S. Emerson, Coos Bay, OR**

IND209-1     Comment noted.

Denny S Emerson, Coos Bay, OR.  
I have read the draft EIS that FERC has put together on the Jordan Cove Energy Project, I agree with FERC's findings. FERC has looked at every aspect of this project and analyzed each potential issue that may come about during construction as well as after construction is completed. This is a large project and yes it is going to be very evident that something big is going to be coming into our community but as FERC has laid it out, there are a lot of steps explained in this document that are going minimize the damage during construction as well as steps to ensure that everything is put back to as close as natural prior to beginning the project. I would like to ask you to move forward with the permitting process so we can be one step closer to one of the largest things that Coos County has had the opportunity to be a part of in many years.

IND209-1

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IND210

Denny S Emerson, Coos Bay, OR.  
I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. I believe that Jordan Cove has submitted a complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND210-1

IND210-2

**IND210 Denny S. Emerson, Coos Bay, OR**

- IND210-1 Comment noted.
- IND210-2 See the discussion on the Blue Ridge alternatives in section 3.4.2.2.



20150206-5123 FERC PDF (Unofficial) 2/6/2015 11:34:30 AM

IND211

**IND211 Ron K. Strauser, Coos Bay, OR**

IND211-1 Comment noted.

Ron K Strauser, Coos Bay, OR.  
I have read the draft EIS that FERC has put together on the Jordan Cove Energy Project, I agree with FERC's findings. FERC has looked at every aspect of this project and analyzed each potential issue that may come about during construction as well as after construction is completed. This is a large project and yes it is going to be very evident that something big is going to be coming into our community but as FERC has laid it out, there are a lot of steps explained in this document that are going minimize the damage during construction as well as steps to ensure that everything is put back to as close as natural prior to beginning the project. I would like to ask you to move forward with the permitting process so we can be one step closer to one of the largest things that Coos County has had the opportunity to be a part of in many years.

IND211-1

20150206-5124 FERC PDF (Unofficial) 2/6/2015 11:36:10 AM

IND212

**IND212 Ron K. Strauser, Coos Bay, OR**

Ron K Strauser, Coos Bay, OR.  
I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. I believe that Jordan Cove has submitted a complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND212-1

IND212-2

- IND212-1 Comment noted.
- IND212-2 See the discussion on the Blue Ridge alternatives in section 3.4.2.2.

20150206-5126 PERC PDF (Unofficial) 2/6/2015 11:47:17 AM

IND213

**IND213 Reitha Jacobs, Salem, MO**

Reitha Jacobs, Salem, MO.

Please deny the permit to proceed with this LNG pipeline. It is harmful to the environment and wildlife. We have so little land left in a state suitable state. This project will clear cut a 100' wide swath through wildlife habitat along 75 miles of public forests in Southern OR, 80% of which has been reserved for imperiled wildlife.

Canada should not be allowed to have the US take these lands by purchase or eminent domain. Over 300 residents and 400 waterways will be affected. The US does not need the gas. It will be sent overseas with Canada being the benefited country, not the US (even if the US is indirectly benefited by promoting good PR).

This project in no way assists with lessening dependence on our natural resources. It requires clear cutting along pristine water sources.

Fracking leaves in its wake a habitat that is an eyesore, even if "restored." I have seen the disaster it produces, leaving the streams and rivers polluted by continuously escaping contaminants.

I have personally hiked and backpacked over much of Oregon for over 20 yrs. This kind of irresponsible project would ruin this environment for recreation.

Please, please, listen to the desire of a concerned citizen and halt this project!

Thank You,

Reitha Jacobs

IND213-1 Comment noted.

IND213-2 Comment noted.

IND213-3 Comment noted.

IND213-4 See the response to IND1-3.

20150206-0007 FERC PDF (Unofficial) 02/06/2015

ORIGINAL

IND214

January 30, 2015

Kimberly Rose, Secretary  
FERC  
888 First St NE Room 1A  
Washington, D.C. 20426

2015 FEB -6 A 9 11  
FEB 6 2015  
10 07 AM  
FEB 6 2015  
10 07 AM

Re: Docket #5 CP 13-483  
and CP 13-492  
I am OPPOSED to the Jordan  
Cove Pipeline!

Dear Ms. Rose,

As a resident of Southern Oregon  
(and a homeowner), I am strongly  
AGAINST the Jordan Cove Pipeline.  
It would be a disaster for our  
area. Please stop it!

IND214-1

Sincerely  
Gail Pearlman  
(Gail Pearlman)  
1122 NW Elm St.  
Grants Pass, OR 97526

IND214 Gail Pearlman, Grants Pass, OR

IND214-1 Comment noted.

20150206-0010 FERC PDF (Unofficial) 02/06/2015

Kimberly Bose, Secy.  
FERC  
888 First St. NE, Room 1A  
Washington, DC 20426

IND215  
ORIGINAL

**IND215 Kate Geary, Ashland, OR**

IND215-1 Comment noted.

CPB-483

I am strongly OPPOSED to the Jordan Cove LNG Pipeline.

IND215-1

Kate Geary  
190 Walker Ave  
Ashland, OR 97520

*Kate Geary*

2015 FEB -6 A 9 11  
12:07 PM

20150206-0011 FERC PDF (Unofficial) 02/06/2015

ORIGINAL

Jan 30 2015

IND216

I am opposed to the Jordan Cove Pipeline!

IND216-1

Regarding docket numbers  
CP13-483 - CP13-492

Our Clean Water is at Risk!

Please put more effort into  
renewable energy and restructuring  
so that we don't need oil.

IND216-2

Thank you.

~ Sophia Boyle

Sophia Boyle  
464 Lit Way  
Ashland, OR  
97520

2015 FEB -6 A 9 11  
PM  
2015

**IND216 Sophia Boyle, Ashland, OR**

IND216-1 Comment noted.

IND216-2 Comment noted.

20150206-0009 FERC PDF (Unofficial) 02/06/2015

ORIGINAL CPB-483

I Am Strongly Opposed  
to the Jordan Cove LNG  
Pipeline

Sincerely yours  
Polly Elliott

IND217

IND217-1

**IND217** **Polly Elliott**

IND217-1 Comment noted.

2015 FEB -6 A 9 13  
FEB 6 2015

20150206-5164 FERC PDF (Unofficial) 2/6/2015 1:14:17 PM

IND218

**IND218 Theresa Haga, North Bend, OR**

IND218-1 Comment noted.

Theresa Haga, North Bend, OR.

I have read the draft EIS that FERC put together on the proposed Jordan Cove Energy Project and I agree with FERC's findings. FERC has reviewed all aspects of this project and the potential issues that may come about during the construction as well as after the construction is completed. This project is no different than many other projects around the state that deal with the same impacts each day. By following the rules and regulations of the permits obtained along with the proper monitoring, this project will have minimal environmental impacts. I would like to request you move forward with the permitting process so this community that I love and live in can be one step closer to one of the largest things to happen to Coos County in quite some time. This region will win with this project.

IND218-1



20150206-5165 FERC PDF (Unofficial) 2/6/2015 1:24:52 PM

IND219

**IND219 Theresa Haga, North Bend, OR**

Theresa Haga, North Bend, OR.  
I have reviewed the DEIS and agree with FERC's findings. As with any project, the community and environment could be affected to a certain degree. It appears to me that both FERC and Jordan Cove Energy have addressed issues to ensure this project will be a success to all parties involved. I'm requesting that FERC proceed with the permitting process to grant Jordan Cove Energy their permit for this project. I also requests that you review the alternate Blue Ridge Route for the pipeline. Although both options are viable, the Blue Ridge Route would be a more suitable region, due to the fact it affects less private parcels and greater public safety both during construction and operation.

Thank you.

IND219-1

IND219-2

- IND219-1 Comment noted.
- IND219-2 See the discussion on the Blue Ridge alternatives in section 3.4.2.2.

20150206-5182 FERC PDF (Unofficial) 2/6/2015 2:22:43 PM

IND220

**IND220 Maryann Rohrer, Portland, OR**

IND220-1 Alternatives are addressed in chapter 3.

Maryann Rohrer, North Bend, OR.  
There is no need for this proposed project and alternative have not been  
addressed in the DEIS for the proposed project. Therefore it is not in  
compliance with NEPA.

IND220-1

20150206-5181 FERC PDF (Unofficial) 2/6/2015 2:21:25 PM

IND221

**IND221 Maryann Rohrer, North Bend, OR**

Maryann Rohrer, North Bend, OR.  
There is no need for this project and alternatives have not been adequately addressed in the DEIS.

the Jordan Cove draft EIS is a 5000 page attempt to evade and circumvent the letter and intent of the National Environmental Policy Act. I ask that FERC rescind the current draft EIS and go back to the drawing board and prepare a new draft EIS that is in full compliance with existing law and regulations of NEPA.

IND221-1

IND221-2

- IND221-1 Alternatives are addressed in chapter 3.
- IND221-2 The DEIS is approximately 1,350 pages plus appendices. It is a science-driven document that analyzes the environmental effects of the proposed LNG facilities, the proposed 232-mile gas pipeline, and the amendments that may be needed if the Project crosses federal land. The DEIS complies with NEPA.

20150206-5175 FERC PDF (Unofficial) 2/6/2015 2:12:52 PM

IND222

**IND222 Maryann Rohrer, North Bend, OR**

Maryann Rohrer, North Bend, OR.  
the Jordan Cove draft EIS is a 5000 page attempt to evade and circumvent  
the letter and intent of the National Environmental Policy Act. I ask  
that FERC  
rescind the current draft EIS and go back and prepare a new draft EIS  
that is in full compliance with existing law and regulations of NEPA.

IND222-1

IND222-1 The DEIS is approximately 1,350 pages plus appendices. It is a science-driven document that analyzes the environmental effects of the proposed LNG facilities, the proposed 232-mile gas pipeline, and the amendments that may be needed if the Project crosses federal land. The DEIS complies with NEPA.

20150206-0008 FERC PDF (Unofficial) 02/06/2015

IND223

**IND223 Wendy Eppinger, Ashland, OR**

Kimberly Bose, Secy.  
FERC  
888 First St. NE, Room 1A  
Washington, DC 20426

ORIGINAL

CPB-483

IND223-1 Comment noted.

I am strongly OPPOSED to the Jordan Cove LNG Pipeline.

Wendy Eppinger  
190 Walker Ave  
Ashland, OR 97520

IND223-1

2015 FEB - 6 A 9 14  
2015 FEB - 6 A 9 14  
2015 FEB - 6 A 9 14

20150206-5196 FERC PDF (Unofficial) 2/6/2015 3:02:20 PM

IND224

**IND224 Dianne Ensign, Portland, OR**

Dianne Ensign, Portland, OR.

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this project's contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

IND224-1

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

IND224-2

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

IND224-3

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

IND224-4

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

IND224-5

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND224-6

IND224-1 See the response to IND1-1.

IND224-2 See the response to IND1-3.

IND224-3 See the response to IND1-4.

IND224-4 See the response to IND1-5.

IND224-5 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.

IND224-6 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150209-5005 FERC PDF (Unofficial) 2/7/2015 12:06:53 AM

IND225

**IND225     Juli Hosking, Scottsburg, OR**

IND225-1     Comment noted.

IND225-2     Comment noted.

Juli Hosking, Scottsburg, OR.  
Secretary Kimberly Bose,  
Deputy Secretary Nathaniel Davis, Sr.,

The Jordan Cove Energy Project is very important to the citizens of the rural Oregon Coast. This project will bring many needed jobs to our area. Coos County and the surrounding counties have been in a deep depression for two decades. The coastal communities need the jobs that will be generated by this energy project.

IND225-1

The Jordan Cove Energy Project is important for Oregon.

IND225-2

There is strong support for this project in our communities.

20150209-5006 FERC PDF (Unofficial) 2/7/2015 12:14:14 AM

IND226

James Fereday, Coos Bay, OR.  
To:  
Kimberly Rose, Secretary  
FERC  
888 First Street NE, Room1A  
Washington, DC 20426

From:  
James S. Fereday  
1017 Elm Ave.  
Coos Bay, OR 97420  
jsfmc@frontier.com

February 5, 2015

COMMENTS ON DRAFT EIS FOR THE JORDAN COVE LIQUFACTION PROJECT AND PACIFIC  
CONNECTOR PIPELINE PROJECT  
Docket Numbers CP13-483-00 AND CP13-422-00

From my review of the draft EIS, I am recommending that the FERC rewrite  
the draft EIS and follow the laws that guide an Environmental Impact  
Statement. What the FERC has set forth in this document does not serve  
as a proper device for decision making.

IND226-1

National Environmental Policy Act (NEPA) requires certain elements for  
Environmental Impact Statements; these are the four significant parts:

1. Discussions of the purpose of and need for the action
2. Alternatives (when there is an unresolved conflict concerning  
alternative uses of available resources)
3. The affected environment
4. The environmental consequences of the proposed action

For the following comments, I am including references to Code of Federal  
Regulations in italics as it is clear that FERC has missed,  
misinterpreted, or ignored these. [http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=\\$SID-b99b470baddb3f37221837136353a34d&n=pt40.33.1502&r=PART&ty=HTML&se40.33.1502\\_116](http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=$SID-b99b470baddb3f37221837136353a34d&n=pt40.33.1502&r=PART&ty=HTML&se40.33.1502_116)

Purpose and Need - CFR §1502.1 Purpose. The primary purpose of an  
environmental impact statement is to serve as an action-forcing device to  
insure that the policies and goals defined in the Act are infused into  
the ongoing programs and actions of the Federal Government. It shall  
provide full and fair discussion of significant environmental impacts and  
shall inform decisionmakers and the public of the reasonable alternatives  
which would avoid or minimize adverse impacts or enhance the quality of  
the human environment. Agencies shall focus on significant environmental  
issues and alternatives and shall reduce paperwork and the accumulation  
of extraneous background data. Statements shall be concise, clear, and to  
the point, and shall be supported by evidence that the agency has made

## IND226 James Fereday, Coos Bay, OR

IND226-1 The DEIS follows the regulations (at 40 CFR 1500-1508)  
implementing the NEPA that governs preparing an EIS. The FEIS  
will be used by the Commission, along with other analyses, to  
make a decision on the Project. See section 1.3.



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**IND226 Continued, page 2 of 6**

the necessary environmental analyses. An environmental impact statement is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions.

Comments:

The purpose and need was defined by the applicant, Jordan Cove, in the Executive Summary and elsewhere in the document which states: "The purpose of the Project is to create a new West Coast LNG export point to mainly serve Asian customers, and potentially markets in Alaska and Hawaii." Also, from Chapter 1, "According to Jordan Cove's application, the Project is a market-driven response to the increasing availability of competitively priced natural gas from western Canadian and Rocky Mountain sources, and robust international demand for natural gas."

There is not a fair discussion of public need, national or local (other than the employment benefits - 5.1.9 Socioeconomics) nor are reasonable alternatives addressed in any depth. Depth is replaced with breadth in this document which contains 1,400 pages from contents to end of Chapter 5, and with the Appendices, totals 5,041 pages (please refer to CRF \$1502. Page limits). Much extraneous background data is given, some repeated, and the reader is left with more of a task of winnowing than gaining a clear view of the installation procedure for really only one project option for an LNG plant and pipeline. The purpose is clear to any reader, allow a Canadian company Veresen to profit on a market-driven commodity in a small community with a big port.

IND226-2

Alternatives - CFR \$1502.14 Alternatives including the proposed action. This section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (\$1502.15) and the Environmental Consequences (\$1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public. In this section agencies shall:

- (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
- (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
- (c) Include reasonable alternatives not within the jurisdiction of the lead agency.
- (d) Include the alternative of no action.
- (e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.
- (f) Include appropriate mitigation measures not already included in the proposed action or alternatives.

Comments:

IND226-2 The DEIS does not discuss public need. The Commission will make that determination. Alternatives are addressed in chapter 3. The purpose of the DEIS is to present the environmental effects of the Project to the public for their review and comments.

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**IND226 Continued, page 3 of 6**

Chapter 3 Alternatives, does not give comparison of alternatives to building an LNG facility in Coos Bay. Instead, in the beginning of this chapter it states:

"In accordance with the NEPA and Commission policy, we have evaluated a number of alternatives to the JCE & PCGP Project to determine if any are reasonable and environmentally preferable to Jordan Cove's and Pacific Connector's proposed action. Alternatives considered, which are described in more detail below, include the No Action Alternative, system alternatives, LNG terminal alternatives, pipeline route alternatives, and aboveground facilities alternatives. Alternatives were evaluated against the purpose and objectives of the JCE & PCGP Project, as described in section 1.3 of this EIS."

The FERC either misunderstands or is misleading what comparison of alternatives should be in an EIS. I shall point out again from code, (the EIS) should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public. The FERC has chosen to compare any and all alternatives to the objectives of this project, not the project itself and dismisses them because they don't fit the objectives. By doing so, the FERC has decided which project alternative is chosen, the only project that meets its own objectives, namely, Jordan Cove and the Pacific Connector.

Nearly all coverage of alternatives to Jordan Cove is thin. Again, the regulations state, (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

For instance, the Gig Harbor peak shaving facility as a possible LNG export facility is discarded because the plant is one mile away from vessel reach, but Jordan Cove is proposing a 232 mile pipeline! One could conclude that something other than the distance to a vessel is to be considered, but there is no other information to help the reader to compare realities. Another in the same dismiss-in-a-sentence mode is Newport, Oregon's peak shaving facility due to a port that would "...not accommodate LNG vessels without extensive dredging." From Google Earth, I measured 3.3 miles of dredging in Yaquina Bay compared to 7.5 for Coos Bay. The point here is, there is not an objective description of alternatives.

The EIS does point out a feasible alternative in the port of Warrenton, Oregon on the Columbia River. It is one proposed export facility "...that can be considered a viable alternative to the JCE & PCGP Project." This project gets much more than a sentence or two description that the other sites received, but this one too is dropped due to the fact that an EIS hasn't yet been released. So, a viable alternative on the west coast, in Oregon, is considered not an option in this EIS. This astonishing admission gives further indication that the decision has already been made by FERC to approve the Jordan Cove project.

LNG Development Company, LLC has applied to and granted approval from D.O.E. for The Oregon LNG Bidirectional Project in Warrenton. Looking over their application, there are some stunning differences, and advantages to this site over Jordan Cove. One is that there would be no need for a power plant "The proposed source of the power is the 115-

IND226-3 Section 3 of the EIS presents a range of alternatives, including the No Action Alternative, System Alternatives, and Route Alternatives.

IND226-4 The Gig Harbor site is one mile away from the harbor and would not be accessible to LNG vessels. As stated in section 3.2.2.3, the port of Newport is small and would require extensive dredging. Jordan Cove does not propose to conduct any dredging along the 7.5-mile-long existing navigation channel in Coos Bay.

IND226-5 As stated in section 3.2.2.4, the Oregon LNG Project can be considered a viable alternative to the JCE & PCGP Project. The section also states that FERC is conducting an environmental review of this project. This EIS will identify the effects of the Oregon LNG projects.

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kilovolt (kV) Bonneville Power Administration (BPA) power line that runs north to south approximately ¼ mile west of the Compressor Station." Another distinct advantage is the pipeline to an existing trunk line is 87 miles long compared to 232 miles for the Pacific Connector. This would be an import and export facility, owned and operated by an American company. It certainly deserves alternate consideration in the Draft EIS.

The bulk of Chapter 3 Alternatives is devoted to system alternates within the project scope. Alternate siting of Jordan Cove on North Spit or the myriad pipe reroutes is irrelevant in a document meant to consider alternatives to a proposed project. This omission of substantive process (CFR §1502.14) is the most glaring in this DEIS.

The affected environment - §1502.15 Affected environment. The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues. Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement.

Comments:

Since there are no alternatives, a discussion of the affected environment addresses one alternative, the project itself. Chapter 4 all but succinctly covers this one alternative, giving no basis for deciding on but one choice. Chapter 4 is 1046 pages, this is grossly over the page limit for the entire EIS, even complex projects like this one (please refer to CFR §1502. limits.). "Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement."

The environmental consequences of the proposed action - §1502.16 Environmental consequences.

This section forms the scientific and analytic basis for the comparisons under §1502.14. It shall consolidate the discussions of those elements required by sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA which are within the scope of the statement and as much of section 102(2)(C)(iii) as is necessary to support the comparisons. The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. This section should not duplicate discussions in §1502.14. It shall include discussions of:

- (a) Direct effects and their significance (§1508.8).
- (b) Indirect effects and their significance (§1508.8).

IND226-5  
Cont.

IND226-6

IND226-7

**IND226 Continued, page 4 of 6**

IND226-6 We do not agree that the alternatives discussed in chapter 3 can be considered an "omission of substantive process".

IND226-7 The document follows the standard format for FERC environmental impact statements. It is lengthy because it analyzes the environmental effects of the proposed LNG facilities, the associated 232-mile gas pipeline, and the Forest Service and BLM plan amendments needed for the pipeline to cross federal land.

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(c) Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned. (See §1506.2(d).)

(d) The environmental effects of alternatives including the proposed action. The comparisons under §1502.14 will be based on this discussion.

(e) Energy requirements and conservation potential of various alternatives and mitigation measures.

(f) Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures.

(g) Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures.

(h) Means to mitigate adverse environmental impacts (if not fully covered under §1502.14(f))

Comments:

In Chapter 4, environmental consequences of the South Dunes Power Plant (420MW natural gas-fired) are covered. These impacts, wetlands, plants, animals, soils (affected or not by previous activities), and air pollution are listed.

The DEIS should weigh the environmental consequences of adding further greenhouse gases through the addition of the South Dunes Power Plant, when, at least in Oregon, we have been making advances in reducing this trend. Portland General Electric's Boardman Coal-fired generation plant is slated to close by December 2020 due to air quality standards non-compliance. The South Dunes Power Plant would supplant this facility as the largest CO2 emitter in Oregon if built. Since 2001, The Energy Trust of Oregon, through offered incentives for residential and commercial energy conservation and generation, has offset enough energy loss to avoid building another electrical generation facility. In 2011, Pacific Power and Portland General Electric "led the nation in the number of customers participating in green power..."

It is too tempting to again bring up the fact that there is no comparison to alternatives to this wasteful energy circus, especially in light of the existence of a project that is currently DOE approved (Warrenton) and will not add to the carbon foot print through an added electrical generation plant. Please add this to the assessment in the revised DEIS that I am suggesting.

FERC has acknowledged that Jordan Cove terminal marine slip construction for the LNG plant will need to be larger. "A smaller slip would be impracticable given Jordan Cove's multi-user concept, which would require enough space for three berths, including one for LNG vessels, one for tugs and escort boats, and a potential future west side berth for other commercial ships, assuming the Oregon International Port of Coos Bay (Port) follows through on its plans to provide for large deep-draft container ships." This extra berth, on the west side next to Henderson Marsh, will necessarily have to be developed for access for either the container ships or Principle Power's staging area for their wind generators. That would most certainly involve filling of at least part of Henderson Marsh adjacent to the berth. This hasn't been addressed in the environmental assessment and Henderson Marsh is certain to be a future casualty in the proposed design.

**IND226 Continued, page 5 of 6**

- IND226-8 See the response to IND1-1.
- IND226-9 The EIS does compare the Jordan Cove LNG project to the Oregon LNG project; see section 3.2.2.4.
- IND226-10 The marine slip does not have to be any larger than proposed. There is no berth proposed for the west side of the slip and impacts on Henderson Marsh would be avoided. See our response to comment FA6-1.

IND226-8

IND226-9

IND226-10

20150209-5006 PERC PDF (Unofficial) 2/7/2015 12:14:14 AM

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**IND226**      **Continued, page 6 of 6**

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IND226-11    The DEIS complies with NEPA.

The Commission should seriously revisit this document with attention to  
the rules set forth by NEPA.

IND226-11

20150212-5000 FERC PDF (Unofficial) 2/11/2015 5:28:47 PM

IND227

**IND227 Lisa Childs, Grants Pass, OR**

IND227-1 This Project will not inject chemicals into the water or soil of Southern Oregon, and it does not include oil or gas drilling. There are over 300,000 miles of natural gas transmission pipes in the country, breaks are rare, see section 4.13.9.1. Any loss of life is tragic, but as shown in table 4.13.9.3-2, a person in the US is more than 20,000 times as likely to be killed in a motor vehicle accident as in an accident connected with a gas transmission pipeline (2 accidental deaths per year over 20 years). Deaths due to fires are more than 1,500 times as great.

Lisa Childs, Grants Pass, OR.

Stop the Liquid Natural Gas [LNG] Canadian company, Verezen, and their international affiliates from destroying Oregon's rural countryside, rivers, tributaries, creeks, forests and coastline. Deny Verezen a permit to place a 300 mile pipeline through our delicate ecosystems.

The fossil fuel industry has an abysmal safety record, close to a MILLION ACCIDENTS last century! Most recently we have witnessed the permanent destruction of the treasured Yellowstone National Park and the glorious Galapagos Islands!

This Jordan Cove Liquid Natural Gas [LNG] project started with ConocoPhillips eight years ago. The state of California and Washington rejected this pipeline and so did the people of Oregon. Seventy-one percent of Oregonians want to move into the twenty first century with solar and clean renewable energy.

The international fossil fuel conglomerate, Verezen, is trying to take over where ConocoPhillips left off. Verezen has falsely represented the economic benefits to Oregon and have chosen one of the most economically challenged coastal regions promising an economic boom. The truth is the jobs are temporary, the LNG will be exported to Asia via the Jordan Cove. This project will destroy a fifteen billion dollar tourism industry in Oregon as well as the environment.

This pipeline project threatens our magnificent rivers and ecosystems by injecting POISONOUS cancer causing chemicals into the water and soil. It will rip up 400 waterways throughout Southern Oregon spewing waste water from oil and gas drilling containing chemicals like arsenic, BENZENE, heavy metals, and RADIOACTIVE MATERIAL. The INEVITABLE BREAKS in the pipeline will burn down our forests as they EXPLODE. The LNG containers will sit floating on our coast in Coos Bay where they will remain an easy target for SABOTAGE. The threat of tsunami raises even more safety concerns. It is a fallacy to think we can mitigate any of these DANGERS!!!

This foreign company, Verezen, is working to use eminent domain to initiate the biggest private and public land grab in Southern Oregon's history to export LNG

IND227-1

20150212-5000 PERC PDF (Unofficial) 2/11/2015 5:28:47 PM

**IND227**      **Continued, page 2 of 2**

to Asia. This is fundamentally UNCONSTITUTIONAL on it's face! Our property values will decrease as the FILTHY waste dredge, increase in noisy commercial traffic, the choking stench and obnoxious noise will turn people away who are looking to buy a retirement home in one of the crown jewels of the northwestern United States. There are no good reasons to pursue this project.

We have thousands of new technologies waiting in the wings that that will create tens of thousands of CLEAN ENERGY PERMANENT JOBS in Oregon without destroying our beautiful state and tourist industry.

One example is SOLAR WORLD, the largest solar module production facility in the Americas headquartered in HILLSBORO, OREGON which has created new jobs and an economic shot in the arm since moving here. Oregonians deserve economic local growth that benefit our citizens not foreign corporations. The citizens of Oregon say no to the Jordan Cove project and yes to twenty first century renewable energy.

Thank you, Lisa Childs

IND227-2

IND227-2      The Project is not "unconstitutional," as it falls under the Natural Gas Act, a law passed by Congress, according to the Constitution. Property values are discussed in section 4.9.2.3 of the EIS. Traffic is addressed in section 4.10. Air quality and noise are discussed in section 4.12.

20150209-5008 FERC PDF (UnoOfficial) 2/7/2015 1:36:29 AM

IND228

Sheryl Kaplan, Pasadena, CA.

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this project's contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must reduce our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

IND228-1

Natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

IND228-2

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

IND228-3

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as it did in Fukushima, Japan. The LNG would immediately start to warm and expand. What then?

IND228-4

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company, is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Do not give the right to a foreign company to condemn Oregonians' land.

IND228-5

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230 miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if peoples' lives are an acceptable trade for saving corporate profits.

IND228-6

IND228-7

This project will clear cut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

IND228-8

## IND228 Sheryl Kaplan, Pasadena, CA

IND228-1 See the response to IND1-1.

IND228-2 See the response to IND1-2.

IND228-3 See the response to IND1-3.

IND228-4 See the response to IND1-4.

IND228-5 See the response to IND1-5.

IND228-6 See the response to IND1-7. Also see section 4.2.2.2 which describes the various hazards that were considered for the proposed pipeline construction through mountainous terrain.

IND228-7 See the response to IND1-2.

IND228-8 See the response to IND1-2.



20150209-5008 FERC PDF (Unofficial) 2/7/2015 1:36:29 AM

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

I value Oregon Women's Land Trust. It is a 501(c)(3) nonprofit committed to ecological preservation of land. The women there have protected Owl Farm for 40 years. Now is no time to take their land for a massive fossil fuel infrastructure project.

IND228-9

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**IND228**      **Continued, page 2 of 2**

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IND228-9      Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.

20150209-5012 FERC PDF (Unofficial) 2/7/2015 10:53:36 AM

IND229

Pamela Plummer, Coos Bay, OR.  
I understand that with any project there will be environmental concerns and issues. I respect the EIS process and feel that FERC has done its due diligence taking into consideration the full environmental impact to our area. However, I would like FERC to reconsider the "Blue Ridge" route as it has less of an impact on local land owners and would provide greater public safety among this section of the pipe line route. Additionally, I feel that Jordan Cove has provided proper mitigation for all aspects of the project, even going above and beyond what is necessary in some cases. It is not only their fiscal responsibility to the organization itself but the responsibility as a community partner. They have proven to be a good community partner as they look out for the welfare and safety of our community by addressing the issues and concerns through the application process and beyond. There are many benefits of this project to our local economy. Over the years, decades in fact, Coos County has successfully shown that quality of life can be mixed with business and industry through the use of environmentally sound practices. By following the rules and regulation of the permits obtained along with proper monitoring and reporting throughout the construction and operation, this project too will have a positive impact on many different fronts. I appreciate the time, resources and thorough research that has gone into the preparation of the draft EIS and I support the findings in whole.

IND229-1

IND229-2

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**IND229 Pamela Plummer, Coos Bay, OR**

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IND229-1 Comment noted. The Blue Ridge alternatives are compared in section 3.4.2.2.

IND229-2 Comment noted.

20150212-5001 FERC PDF (UnoOfficial) 2/11/2015 5:46:00 PM

IND230

**IND230 Tim A. Slater, Coos Bay, OR**

IND230-1 Comment noted. The Blue Ridge alternatives are compared in section 3.4.2.2.

Tim A Slater, Coos Bay, OR.  
February 11, 2015

Federal Energy Regulatory Commission  
RE: Jordan Cove Energy Project  
Docket No. CP13-483-000  
Pacific Connector Gas Pipeline  
Docket No. CP13-492-000  
Commissioners:

The Bay Area Chamber of Commerce, after a careful document review, is pleased to express our support for the draft EIS that FERC has put together on the Jordan Cove Energy Project, including the pipeline and plant site construction. We agree with FERC's findings.

We believe that FERC has looked at every aspect of this project and analyzed each potential issue that may come about during construction as well as after construction is completed. There are many processes explained in this document that are going minimize the impact to the environment and community. These plans and procedures are referenced in the DEIS, and we believe, more than adequately address all necessary mitigation efforts.

We also urge you, once again, to review the alternate Blue Ridge Route for the pipeline. Although both proposed locations are viable options, it appears that the Blue Ridge Route would be a more suitable site, as it affects less private parcels, and above all offers greater public safety both during construction and operation.

We ask you to move forward with the permitting process, finalizing this EIS and granting Jordan Cove Energy Project (JCEP) its operating permit. As the Bay Area Chamber of Commerce we represent every facet of this area's economy through our over 600 members. This is one of the largest things that Coos County has had the opportunity to be a part of in many years that will enhance not only the local economy, but every aspect of life on Oregon's south coast. Make this investment in our future, by granting the permit that meets all your required standards to JCEP.

Sincerely,

Rick Skinner  
President  
Bay Area Chamber of Commerce

IND230-1

20150209-5015 PERC PDF (Unofficial) 2/7/2015 1:17:15 PM

IND231

**IND231 Christine Landucci, Bandon, OR**

IND231-1 Comment noted.

IND231-2 The project was proposed by Jordan Cove, as discussed in section 1.4. Safety is discussed in section 4.13.

christine Landucci, Bandon, OR.

I am writing to express my strong opposition to the building of the LNG storage facility and pipeline.

IND231-1

I live on the coast in Bandon Oregon and live in the tsunami/earthquake zone.

Our area has been inundated with daily/weekly articles and editorials in our newspaper to convince us to make emergency plans, emergency survival kits for our home and car. Visiting lecturers from major universities speak frequently at our local college and auditorium and have assured us that a major earthquake and tsunami is imminent.

Why why why would we choose to construct a hugely explosive tank of natural gas right on the bay in an area like this?

IND231-2

I strongly oppose this construction on the basis of it's explosive potential!

There are other important reasons as well:

- the increase of dangerous emissions which will result from the accompanying power plant

- negative impact on wildlife

- potential for leaks in the pipeline due to stated thinner pipe walls, less frequent leakage checks, etc because we are a "lightly populated" area.

Sincerely,

Christine Landucci

Bandon OR

20150209-5016 FERC PDF (Unofficial) 2/7/2015 1:56:50 PM

IND232

Richard F. Knablin, North Bend, OR.  
Thursday, February 5, 2015

Ms. Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E., Room 1A  
Washington, DC 20426

Re: Supplemental Information  
Jordan Cove Energy Project, L.P., FERC Docket No. CP13-483-000

Dear Ms. Bose:

I have reviewed the Draft Environmental Impact Statement and disagree with FERC's findings. As with any project, the community and environment would be affected to a certain degree, however the mitigation measures Jordan Cove Energy (JCE) has proposed and/or agreed to incorporate into both the short and long term construction/operation of these facilities does not begin to ameliorate these adversities.

IND232-1

IND232-2

In reviewing this document it is evident that both FERC and JCE have gone above and beyond in ensuring this project will be a success for Veresen, but a total disaster for affected landowners; citizens of North Bend/Coos Bay, and the environment of Southern Oregon. Veresen has violated NEPA rules by trying to influence local governments in its favor. I ask that FERC deny JCE their permit for this project.

IND232-3

IND232-4

Richard Knablin  
555 Delaware St.  
North Bend, OR 97459

**IND232 Richard F. Knablin, North Bend, OR**

- IND232-1 Comment noted.
- IND232-2 We disagree. The mitigation measures proposed by the applicants or recommended in the EIS would reduce impacts on resources.
- IND232-3 The DEIS does not support the statement that this Project would be a disaster. No decision about the Project has been made at this time.
- IND232-4 Veresen did not prepare the DEIS, FERC and cooperating federal agencies did. We are not aware of any requirements of NEPA that prohibit a company from "trying to influence local governments." The local governments have their own permitting process; NEPA is a federal law not a local one.

20150209-5019 PERC PDF (Unofficial) 2/7/2015 4:14:42 PM

IND233

**IND233     Dick Goergen, Coos Bay, OR**

IND233-1     Comment noted.

Dick Goergen, Coos Bay, OR.  
Dear Secretary Kimberly Bose and Deputy Secretary Nathaniel Davis, Sr.

I would like to express my strong support for both of these projects.  
Coos Bay and North Bend need this project for family jobs and to  
strengthen our industrial infrastructure.

IND233-1

I am a long time resident and we Need This Project!

Regards, Dick Goergen, Retired

20150209-5022 FERC PDF (Unofficial) 2/7/2015 5:55:04 PM

IND234

**IND234 Richard Todd Goergen, Coos Bay, OR**

Richard Todd Goergen, Coos Bay, OR.  
February 8th, 2015  
Dear Secretary Kimberly Bose & Deputy Secretary Nathaniel Davis, Sr.:

I have read the DEIS and concur that the Jordan Cove Energy Project & Pacific Connector Gas Pipeline will result in temporary and minimal environmental impacts. However, the economic benefits to our local and State economy will be huge.

These projects will double our County's tax base and provide millions of dollars for our schools and other vital public services. Over 2000 construction jobs and 750 direct & indirect jobs will be generated.

IND234-1

The International Port of Coos bay will benefit from these projects due to harbor improvements and access to 2nd ship berth being paid for by Jordan Cove. NO Tax Payer Money Involved.

IND234-2

Federal funds for infrastructure projects are nearly impossible to win for rural areas such as our own. This privately funded project is welcomed.

Coos County suffers from some of the highest poverty rates in America. The high rates of drug use, domestic violence and property crimes have never been higher. We need the economic infusion this project will provide.

I am a lifelong resident of the Southern Oregon Coast. Also, I am a business & property owner with two separate land parcels within several hundred feet of the proposed pipeline route and project. I am confident in the regulatory permitting process and believe any permit will be issued with conditions to ensure that the most well designed and safe project be built.

Therefore, I support the Jordan Cove Energy Project & Pacific Connector Gas Pipeline. Please complete your thorough review and include the necessary conditions required for this project to move forward.  
Sincerely,  
Richard Todd Goergen  
Coos Bay, OR.

IND234-3

IND234-1 Comment noted.

IND234-2 Comment noted.

IND234-3 Comment noted.

20150209-5023 PERC PDF (Unofficial) 2/7/2015 6:37:57 PM

IND235

**IND235    Beth Goergen, North Bend, OR**

IND235-1    Comment noted.

Beth Goergen, North Bend, OR.  
TO: Secretary Kimberly Rose & Deputy Secretary Nathaniel Davis, Sr.:

Hello, I live in North Bend, Or. and support the Jordan Cove Energy Project & Pacific Connector Gas Pipeline. Our area suffers from some of the worst crime rates, poverty levels and drug use in Oregon. We need the jobs and funds this private project will supply. Our schools, cities, County and Port will all benefit.

The temporary and minimal environmental impacts of these projects as described in the Draft EIS are acceptable in my view. The economic benefits far outweigh the environmental issues which can be mitigated for by adding specific conditional requirements Which must be adhered to in order for the permit to be issued.

IND235-1

Thank you for taking my comments into consideration.

Beth Goergen  
North Bend, OR.



20150209-5032 FERC PDF (Unofficial) 2/8/2015 2:05:39 PM

IND236

Melinda Grant, Grants Pass, OR.

Please extend the comment period by at least 30 days to give everyone time to read and respond to the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND236-1

This is a critical point in time for the future of mankind and the planet. We cannot continue to prioritize short-term corporate profits over the long-term interests of us all. The Intergovernmental Panel on Climate Change (IPCC, 11-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. FERC must consider how The Jordan Cove terminal will affect our plans to achieve these critical goals.

IND236-2

How does moving Canadian gas across sensitive Oregon lands and waterways, displacing 300 Oregonians and permanently damaging the sensitive habitat along the way, to be shipped to China to be burned, further threatening the survival of life as we know it -- how does this really contribute to improving Oregon and America? Where is the public benefit to justify using Eminent Domain to deprive 300 Oregonians of their property and homes? A few temporary construction jobs? More and better profits for a foreign gas and oil industry? Really???

IND236-3

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

IND236-4

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

IND236-5

Oregon and America need to turn the page on oil and gas, and focus our efforts and resources on becoming a leader in the clean energy space. These proposed projects are not in our best interests.

## IND236 Melinda Grant, Grants Pass, OR

- IND236-1 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.
- IND236-2 See the response to IND1-1.
- IND236-3 See the response to IND1-5.
- IND236-4 See the response to IND1-3.
- IND236-5 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7. Impacts to streams are addressed in sections 4.4.2.2 and 4.6.2.3.

20150209-5035 FERC PDF (Unofficial) 2/8/2015 3:16:09 PM

IND237

Harriet Hodgkin, melrose, FL.

This letter is in reference to the fossil fuel project currently under consideration towards mandating eminent domain of privately held lands plus disturbing national public forest in order to lay pipeline to transport liquefied natural gas obtained via fracking to China.

For these reasons,I OPPOSE every aspect of this project:

#1: The process of fracking disturbs environmental equilibrium, polluting water tables and only adding to the rate at which detrimental climate change is occurring worldwide. I have had direct experience with the environmental degradation cused by fracking in the eastern Ohio, western PA area of the country.

#2:The Jordan Cove LNG Terminal and Pipeline analysis failed to consider the true dangers of this project to increase climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction. If not, this LNG project could tip us over into unlivable climate change.

#3:The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue fracking and to expand fracking. Since the Jordan Cove LNG export project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

#4: The proposed pipeline would export American gas overseas. Exporting gas undermines American energy independence while raising gas prices for American businesses and consumers. Natural gas is owned by American taxpayers, not the government or a single business company.

#5:If this pipeline and export terminal are completed, the demand for fracking in the interior west and Canada would increase dramatically. Fracking has dangerous impacts to groundwater and leaks significant amounts of methane, a powerful greenhouse gas, during extraction and transport. Not counting leaks, Jordan Cove would result in 40 million tons of CO2e per year, a significant contribution to driving global climate change.

#6:Pipeline construction would have substantial impacts to water quality at stream crossings through trenches in the stream, sediment from the cleared pipeline route, and the removal of important stream-side forests. Clean cold water is critical for the salmon that define our region, and the direct pipeline impacts as well as a warming climate accelerated by gas exports threaten would threaten that legacy.

#6:Pipeline construction and the 230-mile linear clearcut would have major impacts to public forests managed by the US Forest Service and the Bureau of Land Management, and the species that depend on them.

IND237-1

IND237-2

IND237-3

IND237-4

IND237-5

## IND237 Harriet Hodgkin, Melrose, FL

IND237-1 See the response to IND1-1.

IND237-2 See the response to IND1-3.

IND237-3 See the response to IND1-4.

IND237-4 A 2012 study by the Energy Information Administration (EIA) of the U.S. Department of Energy (DOE) stated: "...U.S. natural gas prices are projected to rise over the long run, even before considering the possibility of additional exports." Another 2012 study by NERA Economic Consultants for DOE found that the nation is "...projected to gain net economic benefits from allowing LNG exports."

IND237-5 See the response to IND1-3.

20150209-5035 FERC PDF (Unofficial) 2/8/2015 3:16:09 PM

In 2014 alone, Williams Company (the one that would build and maintain the Pacific Connector pipeline) has had 3 gas facilities or pipelines explode causing severe damage to property and great risk to human lives. North Bend would be squarely in the risk zone from LNG storage at the terminal. Because the Pacific Connector Pipeline would primarily travel through rural areas, safety standards for the 36" pipeline are downgraded therefore threatening private property, public lands and many lives along the way. In addition to safety, landowners would face the use of eminent domain. Private property for the benefit of a foreign energy company is not a proper use of eminent domain. The LNG tankers, cooling facility, power plant and holding tanks would be located in a tsunami inundation zone that also happens to be on a sand spit extremely susceptible to liquefaction and subsidence. Any accidents place a large part of North Bend at great risk (more on this story in this Oregonian article). This project will clearcut a 95' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, including 42 miles in old-growth forests. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests, like the spotted owl, marbled murrelet, and coho salmon. FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. Instead, FERC is allowing lower safety standards for rural Oregonians. This is because, if the pipeline blows up, fewer people die in rural areas. FERC should not have considered people lives an acceptable trade for saving corporate profits. The current 90 day comment period is not enough time for the public to provide meaningful comments on such a large and complicated project with significant implications for Oregonians, Americans, our lands and waters, our climate and U.S. gas supplies. The public should be given at least 120 days to digest and comment on this huge 5,000-page document.

Please consider this letter as a statement of opposition to the proposed project under docket number CP13-483 and CP13-492. It never ceases to amaze me that a very few (men) think they have the right to commoditize and sell for profit a natural resource that those same individuals did nothing to create in the first place, and, in the process, disturb the lives of people and animals, simply in the name of monetary profit. I support a rational and studied approach to energy production, with the primary purpose of energy independence for our country, with the emphasis on a combination of renewables and limited fossil fuels, not a plan to sell our resources for the benefit of a very few at the expense of very many.

IND237-6

IND237-7

IND237-8

IND237-9

IND237-10

## IND237 Continued, page 2 of 2

- IND237-6 See the response to IND-105.
- IND237-7 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7. Impacts to streams are addressed in sections 4.4.2.2 and 4.6.2.3.
- IND237-8 See the response to IND1-7.
- IND237-9 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.
- IND237-10 Comment noted.

20150209-5036 FERC PDF (Unofficial) 2/8/2015 4:10:25 PM

IND238

Helen Lottridge, Chiloquin, OR.  
The Jordan Cove LNG Terminal and Pipeline project must not be approved, at least until additional comment periods. The environmental impact study did not adequately address major climate change issues. Natural gas is methane, a major contributor to global warming. This project's goal includes expanding fracking, which is very harmful to the environment.

IND238-1

Equally offensive is FERC's willingness to giving a Canadian company rights to condemn Oregon land, including land designated to protect endangered wildlife. Oregon is home to the 400 streams that will have their vegetation permanently cleared.

IND238-2

The comment period must be extended by at least 30-60 days.

IND238-3

**IND238 Helen Lottridge, Chiloquin, OR**

- IND238-1 See the responses to IND1-1, IND5-2, and IND6-1.
- IND238-2 The U.S. Congress decided to convey the power of eminent domain to private companies that receive a Certificate from the FERC when it passed section 7(h) of the NGA in 1947.
- IND238-3 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

20150209-5043 FERC PDF (Unofficial) 2/9/2015 12:03:21 AM

IND239

Ann McMann, North Bend, OR.  
Ms. Kimberly Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE, Room 1A  
Washington DC 20426

Re: Jordan Cove LNG Terminal and Pacific Connector Gas Pipeline, DOCKET  
NUMBERS  
CP13-483-000 and CP13-492-000

February 8, 2015

Dear Ms. Bose:

As a citizen living in the Coos Bay/North Bend area I am writing to  
comment on impacts that Jordan Cove LNG Terminal (JC LNG) and Pacific  
Connector Gas Pipeline may have on the safety of the community and which  
are not addressed in the Draft Environmental Impact Statement (DEIS).

The proposed JC LNG and related facilities are located approximately 8  
miles from the Cascadia subduction zone fault which geologists describe  
as having earthquake potential greater than 9.0 magnitude. Geologists  
tell citizens of the entire Oregon Coast that the seismic event will  
occur. Road signs instruct us how to leave projected tsunami hazard  
zones. An LNG export facility/pipeline's proximity to the Cascadia fault  
and the inability to fully mitigate risk may be unacceptable to people's  
choice of a place to live or work. An economic impact of 11 LNG  
facilities reported in the DEIS did not compare these facilities to JC  
LNG's proximity to the Cascadia fault zone.

IND239-1

Southwest Oregon Regional Airport (OTH) is located 1 mile across the bay  
from JC LNG. The Coast Guard Air Station is just south of OTH. The  
Coast Guard Stations at North Bend and Astoria, located approximately 230  
miles apart, may be the only such facilities in Oregon after January 2016  
due to Coast Guard budget cuts affecting the Newport Coast Guard station.  
Scientists have expressed opinions that JC LNG facility's risk to the  
local community is underestimated in the DEIS. This DEIS does not  
address how rescue efforts, evacuations or medical flights would be  
affected in the event of an accident/fire/explosion at or exceeding the  
JC property or if a Cascadia subduction earthquake/tsunami damages JC  
LNG.

IND239-2

The DEIS analyzes the ability of hospitals in Coos County to absorb the  
needs of added workers for the project. Bay Area Hospital, the largest  
medical facility in Coos county, does not treat patients with severe  
burns, head or spinal cord injuries and is unable to treat certain severe  
internal injuries and some pediatric patients. Such patients are flown  
to trauma centers in Portland, OR or some patients are transferred to  
Eugene, OR. Weather conditions are not always ideal for flights. The  
DEIS does not analyze or compare the ability of the community to treat or

IND239-3

## IND239 Ann McMann, North Bend, OR

- IND239-1 Potential impacts of seismic activity on the Jordan Cove LNG terminal are discussed in section 4.2.1.3.
- IND239-2 As explained in section 4.13, it is highly unlikely that there would be an accident at the LNG terminal that would endanger the public. In accordance with the regulations for implementing the NEPA, we do not have to analyze events that are not reasonable or foreseeable in the EIS.
- IND239-3 Existing medical facilities in Coos County are discussed in section 4.9.1.6. See response to IND239-2.

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**IND239 Continued, page 2 of 2**

evacuate severely injured patients versus other LNG sites or their proximity to higher level trauma centers.

IND239-3  
Cont.

The DEIS states "Prior to initial site preparation" JC should file an Emergency Response Plan including response to a tsunami. Any evacuation plan must include the ability to evacuate residents living outside Coos Bay/North Bend city limits, including Shorewood, Haynes Inlet and Glasgow residents. For example, the 36 inch diameter Pacific Connector pipeline crosses Haynes Inlet and per the DEIS has high potential for liquefaction/lateral spreading as do Kentuck Inlet and Willanch Slough sites east of the bay. One 2 lane road, North Bay Dr., with only 2 exits to Highway 101 follows Haynes Inlet and one 2 lane road, E. Bay Dr, follows the east edge of the Coos Bay waters. In the case of a pipeline fire/explosion or earthquake/tsunami could the many residents outside city limits reasonably evacuate or receive rescue assistance if rural roads, the main north/south Highway 101, McCullough Bridge and other bridges are impassable? How would injured Haynes Inlet residents, LNG or pipeline workers be transported to Bay Area Hospital if Highway 101 was blocked by a pipeline accident? The DEIS does not analyze if risk to evacuees can be mitigated.

IND239-4

The Motor Vehicle Traffic (4.10.1.2) portion of the DEIS does not adequately analyze the effects of the proposed worker camp on traffic patterns in North Bend and on 2 lane McCullough Bridge and Highway 101. The large number of workers commuting to and from the proposed worker camp, whether for work or shopping and activities in North Bend/Coos Bay, will negatively impact residents in the Simpson Heights area of North Bend as well as the many cars and trucks which transit McCullough Bridge daily. This 2 lane highway entrance into North Bend, is especially crowded in the summer. Accidents on McCullough Bridge can hold up traffic for hours. Highway visibility is limited due to the arched road design of McCullough Bridge. Access to the worker camp occurs at the bridge's southern end and adds potential for more accidents, especially rear-ending accident scenarios as cars exit the south end of the bridge. Increased traffic in the area may make it more dangerous for nearby residents to participate in activities such as walking or visiting the parks and will change the culture of neighborhoods. The ability to evacuate the worker camp post tsunami is a concern. These issues need to be addressed.

IND239-5

Residents value the safety, beauty and environment of the Coos Bay/North Bend area. Thank you for the opportunity to provide FERC with added information that will help inform decisions.

Sincerely,

Ann McMann  
66615 Oriole Rd  
North Bend, OR

IND239-4 See response to IND239-2.

IND239-5 The effects that the influx of workers would have on local infrastructure during construction are discussed in section 4.9. Impacts to traffic are discussed in section 4.10.1.2.

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IND240

Annette Bridges, Portland, OR.

I object to this project for many reasons. One is that this this project will facilitate increased fracking, which has been shown to have serious detrimental environmental consequences that should have been considered. In addition, the project intends to build an LNG terminal in the earthquake subduction zone and tsunami area of Coos Bay. This is obviously a bad idea.

Furthermore, this project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

I wish to voice my strong objection to this project, especially without increased publicity and opportunity for additional public input.

IND240-1

IND240-2

IND240-3

IND240-4

IND240-5

## IND240 Annette Bridges, Portland, OR

IND240-1 Comment noted.

IND240-2 We found that the adverse effects of the Project would be mitigated.

IND240-3 Potential impacts from seismic activity on the Jordan Cove LNG terminal are discussed in section 4.2.1.3.

IND240-4 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7. Impacts to streams are addressed in sections 4.4.2.2 and 4.6.2.3.

IND240-5 Comment noted.

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IND241

February 6, 2015

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE, Room 1A  
Washington, DC 20426

Re: Pacific Connector Pipeline CP13-492-000 and Jordan Cove CP13-483-000

Dear Secretary Bose:

I have reviewed the draft EIS for Pacific Connector Pipeline CP13-492-000 and Jordan Cove CP13-483-000 and have attended the public comment meeting in December 2014 at Seven Feathers Hotel and wish to make comment. I am very opposed to the projects and find fault with some of the findings outlined in the draft EIS. Further, I felt the public comment meeting I attended was for the most part not relevant to the draft EIS. It became a political stage for union members indicating a need for jobs and for the high quality of work produced by American workers, rather than addressing the impact statement. Please understand that I am the wife of a Teamster, who works for a company that may benefit from these projects. We are also land owners impacted by the pipeline, so I feel that I can be somewhat unbiased. | IND241-1

One of the most important concerns regarding the projects, is the question regarding public benefit. This is perhaps a DOE issue, rather than the FERC's but I feel compelled to address it. When the project was first proposed it was to import natural gas. One could argue it benefited the public interest and national security. However, export is an entirely different matter. A few permanent jobs and some tax revenue will be generated, but the principal benefit (billions of dollars) will be received by a foreign corporation. Fourth Congressional District Congressman Peter DeFazio has stated, "Pipelines that deliver natural gas to export terminals serve the needs of private companies and foreign manufactures getting our abundant and low cost natural gas." He also states, "The LNG pipeline has no public use." Eminent domain will be used to acquire necessary easements. The U.S. Constitution limits the use of eminent domain to actions necessary for "public use." The Medford Mail Tribune also cited lack of public benefit as the principal factor in opposing the pipeline. I would argue that the project does not serve the greater good. Contrary, I believe that the project actually opposes the greater good because of fracking and fossil fuels impact on global warming. It is very short sighted that the FERC does not address fracking, fossil fuels, and global warming as issues in the draft EIS. Certainly as pointed out by the Mail Tribune the Jordan Cove plant, "that on startup would immediately become one of the largest, if not the largest, emitter of greenhouse gas in Oregon." | IND241-2  
| IND241-3

Now to specific issues within the draft EIS.

**Safety Issues**  
**5.1.2 & 5.1.13**

I have grave concerns regarding earthquake and tsunami potential in the region. The draft EIS does address the issue, but states, "**recommend** that detailed designs and final geotechnical investigations be submitted for our review and approval prior to construction." At a minimum this should be a major **requirement prior to approval** for the project. I was shocked to see that this vital component was only recommended! The Douglas County Planning Commission was so concerned about potential earthquake issues in the Coastal Zone Management Area, pipeline integrity, and fire suppression that they required upgraded pipe and additional training for our local fire department as a condition of approval for the pipeline! (Even with the conditions attached, the Planning Commission's decision is under appeal in the court system.) | IND241-4

I have an additional safety concern relating to the Coast Guard and resources available to deal with LNG shipments and also pipeline access. Page 5-23 states that the Coast Guard had issued an opinion regarding safety that was "contingent upon availability of additional measures necessary to responsibly manage maritime and security issues." Coast Guard resources are already spread thin along the Oregon Coast. Recently, the Coast

**IND241 Kristine Cooper Cates, Camas Valley, OR**

IND241-1 Comment noted.

IND241-2 The DEIS does not address public benefit, as it is not a decision document. The Commission Order would make a determination of whether or not there is public need for the Project.

IND241-3 See the response to comment IND6-1.

IND241-4 Most Commission Orders are conditional. Construction could not begin until all pre-construction conditions have been met. This include staff review of final design and geotechnical investigations.



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Guard was going to withdraw helicopter support from Newport, Oregon due to financial issues. However, public concerns and intervention from government officials temporarily restored the service. I certainly question whether it is in the public's best interest to use scarce Coast Guard resources to support foreign for profit ventures. Perhaps, FERC should further investigate the ability of the Coast Guard (with limited resources) to adequately deal with maritime and potential terrorist security issues.

IND241-5

The final safety issue that I wish to address is discussed under Effects on Federal Lands in the same section. The report states that locating the pipeline in non-populated areas minimizes the chance for unauthorized public access. The FERC did not address rural private land being impacted. Frankly, as a property owner I can assure you that we already have issues with trespassing, associated wood removal, and ATV use. The pipeline corridor will be a further attraction.

IND241-6

#### Other Issues

##### 5.1.8

"Construction ....no direct adverse effects on nearby recreation areas including ODNRA." The draft EIS requires some further input on the traffic plan. I believe that even with the ODOT recommendations there will be major congestion at the intersection of Highway 101 and the Transpacific Parkway, as well as at the intersection of Transpacific Parkway and Horsfall Beach Road. During the summer, especially during holiday weekends, traffic is heavy. I question the reliability of traffic statistics.

IND241-7

##### 5.1.6

Elsewhere in the statement it was noted that one LNG vessel would discharge 9.2 million gallons of ballast water that would not effect water temperature, oxygen or salinity. I do not believe that the draft impact statement adequately addresses the potential negative impact of non-native invasive species. State authorities have been concerned about tsunami debris and its potential as a host for non-native species. It would seem logical that these large ships and associated ballast water would pose a much greater problem.

IND241-8

##### 2-133

The draft EIS inadequately addresses abandonment, decommissioning of the pipeline on private land. Jordan Cove must submit to ODE a report and bond for retirement and restoration at the conclusion of use. There is no such protection for landowners with pipeline decommissioning. Will landowners or the State of Oregon be required to foot the bill for pipeline retirement and restoration of the land? This issue needs to be addressed, not merely referencing 7(b)NGA stating that reasons for the abandonment and impact on customers would be discussed. There should be specific financial requirements.

IND241-9

I have many concerns not addressed in this document relating to water quality in the Middle Fork Coquille River, cultural resources of Camas Valley, which has a long history of occupation by indigenous people, etc. However, I have outlined some specific areas of concern. In conclusion, the FERC must address critical omissions and other issues in the draft EIS. The FERC must place the needs of the land and people of southwest Oregon over the interests of foreign corporations and the petroleum industry!

IND241-10

Sincerely,

Kristine Cooper Cates  
1688 Denn Road  
Camas Valley, OR 97416

(541) 445-2348

## IND241 Continued, page 2 of 2

- IND241-5 The Coast Guard is a cooperating agency in the analysis. This issue is under its purview.
- IND241-6 The proposed Project includes measures to limit unauthorized access to the right-of-way. Note that it is not possible to cross between Malin and Coos Bay without crossing unpopulated areas and without crossing federal lands.
- IND241-7 See the recommendation in section 4.10.1.2 of the FEIS for a revised transportation impact analysis.
- IND241-8 Measures to control non-native species in ballast water for international shipping are governed by Coast Guard requirements and international treaties.
- IND241-9 See the discussion in section 2.7 of the EIS. If Pacific Connector sought to abandon its pipeline on private land, it would have to file a new application with the FERC, and staff would conduct a separate environmental review for that action.
- IND241-10 Comment noted. Cultural resource issues and communications with indigenous people are addressed in section 4.11.

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IND242

Janet Stoffel  
62890 Olive Barber Road  
Coos Bay, OR 97420

February 6, 2015

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E. Room 1A  
Washington, DC 20426

Comments to FERC regarding Docket No. CP13-483-000 and CP13-492-000

Dear Ms. Bose:

I have concerns about several issues regarding the Draft EIS for the Jordan Cove LNG Export Terminal and Pacific Connector Pipeline and will focus primarily on six.

#### Tsunami Zone Siting of an LNG Plant

It is difficult to imagine that FERC and other involved agencies would seriously consider the folly of siting a plant of this volatile nature in the Cascadia Subduction Zone that is very likely to have an earthquake in the near future. According to this article about the Cascadia Subduction Zone (CSZ), published on January 26, 2015, regarding when the CSZ is likely to act up again, the prediction is that Coos Bay is overdue for one soon. "Over its 10,000-year rupture history, earthquakes around magnitude 9 have occurred along the length of the Cascadia Subduction Zone 19 times — about every 526 years. The southern section of the CSZ has seen 19 additional quakes of 8 or higher. Here, very close to home, the average recurrence is every 234 years. With the last major event placed at 315 years ago, we're due. See <http://www.opb.org/news/series/unprepared/isn-26-1700-how-scientists-know-when-the-last-big-earthquake-happened-here/>

The final EIS (FEIS) needs to more appropriately deal with this tsunami issue, as we all know the design plan probably won't protect the local citizens and most likely a tsunami will set off a catastrophic cascade of events that will be deadly to many. A coastal sandbar is not the place to site a plant like this. It is difficult to convince the educated Coos County citizens participating in state-authorized tsunami practice drills, with backpacks packed (as suggested by the Oregon Department of Geology and Mineral Industries), that no such thing will happen here.

IND242-1

## IND242 Janet Stoffel, Coos Bay, OR

IND242-1 Potential impacts from a tsunami are addressed in section 4.2.1.3.

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#### Pool Fires or Explosions

In my scoping comments to FERC on October 15, 2012, after mentioning that I had been a high school teacher in North Bend for 30 years, I said, "As I have been following the process of a possible LNG export terminal on the North Spit I am shocked at how dangerous this project could potentially be for those thousands of students I have taught, and others in this community, and wonder what will happen in the Coos Bay/North Bend community, if an LNG export terminal is built here." I also stated at that time that I expected the Draft EIS on this project to "... explain how it could be that the Sandia National Laboratories, who have performed small scale tests and determined that the 'zone of concern' is 2.2 miles around vessels, can be ignored in the siting of LNG ports (and certainly export terminals) closer than 2.2 miles from civilians. The planned siting is closer than that to the local high School (where I taught and substitute) and the nearby middle school and the largest shopping center on the South Coast of Oregon, not to mention the local airport that has a flight pattern directly over the proposed terminal." In addition, at that time I asked FERC to "...explain how the safety zone around an LNG tanker in the bay, in the event of an accident, is going to prevent the fiery deaths of thousands of local residents, since many people live within this safety zone."

Now that I have reviewed the massive DEIS document, as well as I could by using search tools on line, I still don't have those answers. I specifically remember Paul Friedman stating that the purpose of the scoping process was to let FERC know what we were concerned about and that our comments would be addressed in the DEIS. I did find, on page 980 in section 4, the following: "Estimates for the number of structures and the population within the Zones of Concern were provided in sections 4.7.1.2 and 4.8.1.1 of the FEIS the FERC issued in May 2009 for the previously proposed Jordan Cove LNG import terminal in Docket No.CP07-444-000. No residential structures, hotels, or motels were identified within Zone 1 (within 1,640 feet of the waterway). There are about 11 hotels or motels, and about 5,457 residential structures, including single family homes, apartments, and mobile homes, within Zones 2 and 3 combined, between 0.3 and 2.2 miles outside of the waterway. We estimated that there are approximately 16,922 people total residing within the Zones of Concern."

I have noted that the maps with the identified zones of concern that were in the import DEIS are missing in this DEIS. Did the danger go away, so it was not included now that this is an export instead of an import proposal? I understand that instead of less danger, this export terminal would be **more dangerous**. I base my knowledge of this on a letter written to the FERC as comments on the DEIS dated January 14, 2015, by Jerry Havens, Distinguished Professor of Chemical Engineering at the University of Arkansas and James Venart, Professor Emeritus of Mechanical Engineering at the University of New Brunswick. They state in their letter, "We also believe there remains significant potential for cascading fire and explosion events attending LNG only storage and handling that have not been sufficiently addressed, particularly regarding the worst-possible case events that should be considered on the shore side storage tanks and marine side (ship related), either by accident or terrorist activity. Havens and Venart go

#### IND242 Continued, page 2 of 8

IND242-2 Comment noted.

IND242-3 As stated in section 1.1.1 of this EIS, we are incorporating the findings of the May 2009 FEIS for the import proposal into our current analysis where circumstances have not greatly changed. Because LNG vessel traffic in the Coos Bay navigation channel is similar in the export case, our original analysis of the Zones of Concern for the import proposal remains virtually unchanged. The analysis is summarized in section 4.13.6.3 of this EIS. Second, because an accident involving an LNG vessel in the channel is highly unlikely, as explained in section 4.13, the regulations for implementing the NEPA do not require us to consider events that are unreasonable or not foreseeable.

IND242-2

IND242-3

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on to say, "...the regulations that are being applied to the proposed JCE Terminal appear to give only cursory attention to the additional hazards that will be involved by the proposed expansion of the terminal for export service." I ask that FERC address those findings in the final EIS, even if such findings would cause further alarm for the local citizenry. Also, the maps showing the zones of concern need to be added back to the FEIS.

In my scoping statement in October of 2012, I asked the FERC to "...explain how the LNG tankers and the plant will be protected from possible terrorist attacks. The local airport is so near the plant that all a plane would have to do is veer off course and crash into the plant or a tanker and it would happen so fast that the deed would be done almost before it was detected. Coast guard boats could not stop a plane, so will an anti-aircraft missile base need to be added to the plan? And if that is required, what will be the consequences to the quality of life of local residents living the rural life?" When I searched the DEIS for information about terrorist activity, the only place terrorism was addressed was in 4.13.6.2 LNG Vessel Regulatory Oversight, pg. 975, of section 4: "The ISPS Code requires both ships and ports to conduct vulnerability assessments and to develop security plans. The purpose of the code is to prevent and suppress terrorism against ships; improve security aboard ships and ashore; and reduce the risk to passengers, crew, and port personnel on board ships and in port areas." I don't understand how vulnerability assessments and a security plan can keep a plane from losing power on take-off or landing, or being confused in the fog, thus crashing into an LNG storage tank or even worse, intentionally dropping a bomb on the plant or a tanker. If such an event were to occur, it could wipe out our community. As a Coos Bay resident I find it terrifying that such an attractive target could be sited so near my home and my neighbors. I ask that the FEIS address the issue of airplane accidents, bombs, or terrorist attacks on the plant.

I am concerned about Jordan Cove's design concept of vapor-impervious concrete fences to supposedly prevent the advance of a vapor cloud. Havens and Venart state, "The extreme measures proposed to contain the cloud on the JCE's property are vapor-impervious concrete fences, some forty feet tall, which prevent the advance of a vapor cloud in selected directions. We believe this provision could result in defeating the purpose of the exclusion zones for ensuring public safety -- by introducing additional severe hazards of vapor cloud explosion." I ask that the FEIS address this idea with considerable evidence, that concrete fences would protect the plant, workers, and local residents. We who live near this plant don't want to be part of an experiment and become collateral damage with personal incineration.

I would love to believe the DEIS's glossed over lack of concern for the safety of the people who live near the proposed plant and pipeline, but it seems much is missing about human safety in the DEIS. FERC's environmental impact statement looks at frogs, birds, and fish, etc. in great detail, which I am very pleased to see. However, I can't help but wonder why there is no section that has to do with human beings and the possible impacts on them. I ask that the FEIS address the impacts for the people both

IND242-3  
Cont.

IND242-4

IND242-5

IND242-6

## IND242 Continued, page 3 of 8

IND242-4 See section 4.13 for an assessment of safety risks. Table 4.13.9.2-2 of the DEIS shows the various causes of outside force incidents on natural gas pipelines as recorded by the DOT between 1994 and 2013. Included in these statistics is "intentional" damage, which would include an attack. As shown in table 4.13.9.2-2, there was one incident of intentional damage to natural gas pipelines during this time period, or 0.1 percent of all recorded incidents. As the table shows, the risk of being killed in a motor vehicle accident are more than 20,000 times as great as from an accident involving natural gas or LNG.

IND242-5 See response to IND107-4, -5, and -24.

IND242-6 The entire EIS is a document that addresses the impact of the Project on the quality of the human environment, in compliance with the NEPA. Section 4.13 addresses safety.

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along the pipeline and around the proposed plant. Professors Havens and Venart state, "We have commented repeatedly to the Federal Energy Regulatory Commission (FERC) and the Department of Transportation (DOT) that we believe FERC is approving variances to the requirements of 49 CFR 193, Liquefied Natural Gas Facilities: Federal Safety Standards, that have not been subjected to adequate science based review and appear to provide inadequate fire and explosion exclusion zones to protect the public."

IND242-6  
Cont.

Professors Havens and Venart go on to state that, "We believe these additional hazards have been discounted without sufficient scientific justification in spite of multiple international reports during the last decade of catastrophic accidents involving unconfined (hydrocarbon) vapor cloud explosions. It is clear that the increased hazards due to the presence of significant amounts of heavier-than-methane hydrocarbons, for which there is considerably more extensive research and accident experience than for LNG-ONLY projects, and which are "game-changing" in importance, have been seriously under-estimated in this DEIS. We believe the hazards attending the proposed operations at the Jordan Cove export facility could have the potential to rise, as a result of cascading events, to catastrophic levels that could cause the near-total and possibly total loss of the facility, including any LNG ship berthed there. Such an event could present serious hazards to the public well beyond the facility boundaries." This, with our surrounding forested timber land as fuel, could make the recent "Biscuit" forest fire look like a Sunday school wienie roast. Fire danger to the people, homes, the plant, and forest needs to be addressed in the FEIS.

IND242-7



This is San Juan, Puerto Rico, one of 4 major explosive LNG catastrophes in the last ten years, which are not mentioned in the DEIS. I ask that the dangers be covered extensively in the FEIS, utilizing the most recent modeling information. The public and the regulators need to know and understand the true risks.

IND242-8

## IND242 Continued, page 4 of 8

IND242-7 As explained in section 4.9.1.6 of the EIS, Jordan Cove has executed an emergency plan MOU with the ODE, including a commitment to fund a fire station in the SORSC. Section 4.9.2.6 stated that Pacific Connector has produced an Emergency Response Plan, Fire Prevention and Suppression Plan, and Safety and Security Plan.

IND242-8 This is a photo of the 2009 Cataño oil refinery fire in Puerto Rico. There have not been any "explosive LNG catastrophes" in Puerto Rico as the comment states.

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#### Air Quality

When I spoke at the Mill Casino and delivered my scoping comments in October of 2012, I asked for another explanation in the DEIS. I stated that "Many people have moved to this area because of allergies and asthma and depend on the ocean breezes, cool temperatures, and fresh air for their survival. Explain what chemicals will be exhausted into the air from venting of the storage tanks, tankers, tugboats, and exhaust from the power plant under optimal, normal, and extreme conditions. Also detail the health ramifications of breathing such chemicals. This area often has a temperature inversion and fumes could hang around for days of build up before the inversion lifts. These fumes will be exhausting into the classrooms at the nearby high school and middle school as well as all the homes, hospital, and businesses in the local area." When I searched this DEIS I found 4.14.3.12 Air Quality and Noise on page 1040 of section 4. "The most significant emissions sources for the Jordan Cove Project—i.e., the LNG terminal, South Dunes Power Plant, and marine vessels—and other major stationary sources within 50 kilometers (31 miles)—were explicitly modeled to determine cumulative impacts. The air quality modeling confirmed that operation of those facilities would not result in a significant deterioration of air quality (see section 4.12.1)."

This Jordan Cove--provided emission information is not believable. During the October 2012 scoping in Coos Bay, Dr. Joseph Morgan, a local Coos Bay physician and allergist since 1966, expressed concern about the facility being built upwind of people living in the North Bend / Coos Bay area. He asked FERC to include an analysis and data on the air pollution particulates that would be coming from the facility, particularly with the power plant size being increased from a 37 megawatt plant to a 380 megawatt plant. Dr. Morgan told FERC representatives that "...it was not an exaggeration to state that people attending that very meeting would be affected should the project go forward." (Source: <http://citizensagainstlmg.com/wp/2012/10/15/ferc-scoping-round-2-is-a-success-but-wind-turbines-take-a-hit-in-coos-bay/> )

I have searched your document and while I can find a toxicity levels chart (TABLE 4.13.2.1-1) it is about what would result from a vapor dispersion, and there is also a chart, TABLE 4.13.2.1-2, having to do with chemicals released when flammable materials are above their flash points. The FEIS needs to explain exactly what chemicals would be spewing in the air on a daily basis, cascading over the population and likely causing asthma and other allergic responses in the people who have taken safe harbor in this area because of its fresh ocean breezes. Since scoping I have discovered that in addition to the power plant and terminal structures, the gas being delivered by the 36" pipeline would contain condensates with significant amounts of chemicals such as benzene and other volatile gases that must be removed from the methane before it can go through the liquetaction process, otherwise it would be too explosive. If such new pollution is too much for some residents, making it difficult for them to breathe, will Jordan Cove relocate them or will the government shut the plant

#### IND242 Continued, page 5 of 8

- IND242-9 Emissions are described in section 4.12.1.1. This analysis was conducted by the FERC, not Jordan Cove.
- IND242-10 The Air Quality discusses the emissions and includes tables showing 1-hour, 8-hour, 24-hour and yearly emissions for pollutants.

IND242-8

IND242-10



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down? I suspect it will just be the problem of the people with chemical sensitivities, and they will have to figure out something, as their very survival will be at risk.

IND242-11  
Cont.

#### Coos Bay Estuary

"The South Slough National Estuarine Research Reserve is located in a sheltered arm that forms the southern end of the Coos estuary in southwestern Oregon. The Reserve and its watershed protect a relatively undisturbed area representative of coastal ecosystems in the Pacific Northwest." <http://www.nemr.noaa.gov/Reserve.aspx?ResID=SQS>  
The locals are proud of this estuary which was formed in 1974 (first in the nation) and has a total land mass of over 4700 acres. Many of us volunteer at the Reserve and educate the local school children there. The Reserve is important habitat for salmon, great blue herons, bald eagles, migrating ducks, elk, sea otters, oysters and crabs. The area is a "reserve" and huge amounts of money have been spent on the preservation of the estuary.

Oregon Shores delivered an extensive set of documents prepared by Courtney Johnson <http://oregonshores.org/pdfs/JordanCove404CZMAcomments1.12.2015.pdf> which included these estuarial concerns: "Three years of degraded and lost habitat within the Coos Bay estuary could have significant effects on benthic habitat, water quality, and the aquatic organisms that depend on these areas for survival. The public cannot possibly evaluate the effectiveness of any mitigation plans proposed by Jordan Cove without the specifics of the plans. Simply stating that Best Management Practices ("BMPs") will be used is insufficient for evaluation of mitigation measures specific to each site. Even if Jordan Cove were properly avoiding adverse impacts, the mitigation does not adequately compensate for the damage. The 76 acres of prime estuarine salmon habitat that would be destroyed are irreplaceable. In addition, adequate mitigation must replace habitat values with in-kind and in-place habitat."

IND242-11

The FEIS must more adequately address the details of how and why Jordan Cove should be allowed to possibly destroy our protected estuary. The buck must stop somewhere!

I quote from page 8 of Ron Sadler's DEIS comments to FERC to point out that we have no baseline data on the actual Coos Bay water body and underwater soils. "The need to establish a solid baseline describing current conditions within the Coos Bay estuary as a starting point for the analysis of subsequent impacts that would be caused by the Jordan Cove project is obvious. The Environmental Protection Agency addresses the need as follows: "The cumulative impacts analysis should identify how resources, ecosystems and communities in the vicinity of the project have already been, or will be affected by past, present, or future activities in the project area. These resources should be characterized in terms of their response to change and capacity to withstand

IND242-12

## IND242 Continued, page 6 of 8

IND242-11 Effects on the Coos Bay estuary are addressed in sections 4.4 and 4.6. Impacts would mostly be temporary or short-term. The Project would only take out about 31 (not 76) acres of estuarine habitat in Coos Bay for the Jordan Cove terminal facilities. Estuarine habitat in Coos Bay impacted by construction of Pacific Connector pipeline across Haynes Inlet would be restored after installation. Jordan Cove's most recent Wetland Mitigation Plan was included with its CWA Section 404 permit application to the COE, filed with the FERC on April 17, 2015. The mitigation plan calls for the creation of 7.7 acres of new eelgrass beds in Coos Bay, and the reestablishment of tidal flows within a 45 acre tract adjacent to Coos Bay at the former Kentuck Slough golf course now owned by Jordan Cove.

IND242-12 Baseline data on the Coos Bay estuary is provided in sections 4.4 and 4.6 of the EIS.

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stresses. These data should be used to establish a baseline for the affected resources, to evaluate the significance of historical degradation, and to predict the environmental effects of the project components. In spite of the critical nature and obvious importance of clearly establishing the current ecological condition of the Coos Bay estuary so that its capability, or the lack thereof, to respond to additional impacts brought about by the proposed project might be established, FERC has chosen to completely omit the segment on Affected Environment for the DEIS for the Jordan Cove Project. This is a violation of the NEPA regulations at 40 CFR 1502.15 and ignores the recommendations of the Environmental Protection Agency."

The FEIS needs to address this critical issue of no established baseline, before this project can legally move forward. This environmental impact statement should be stating the starting baseline for impacts to the environment, not choosing to simply leave out this critical information.

#### Drought

California, just south of us, has suffered a classification of "extreme" drought this year [http://earthjustice.org/features/the-california-drought?cid=CKL\\_aSmv3MCFdecoQoc4tzsACA](http://earthjustice.org/features/the-california-drought?cid=CKL_aSmv3MCFdecoQoc4tzsACA) and the south coast of Oregon was classified as being in "severe" drought. [http://www.oregonlive.com/weather/index.ssf/2014/09/oregon\\_drought\\_not\\_much\\_relief.html](http://www.oregonlive.com/weather/index.ssf/2014/09/oregon_drought_not_much_relief.html) This plant, if built, would need massive amounts of water to operate. If this proposed plant adds more CO<sub>2</sub> into the atmosphere, causing increased climate change, there is no way of predicting what will happen to Oregon's supply of water. If the coast of Oregon has increasing drought in the future, would the plant be allowed to siphon off our water table leaving the residents without adequate water supplies for drinking, bathing, and watering our gardens? The FEIS needs to address use of water and plans for possible drought in the Coos Bay, North Bend areas.

#### Applicant's Greed Appears More Important than Citizens' Concerns

Everything in the DEIS boils down to greed on the part of a non-US corporation, Jordan Cove, who defined the purpose and need for the DEIS on pg. 1-13, as essentially their desire "... to export LNG by loading it onto vessels for overseas transport." This whole DEIS is based on the fact that "Jordan Cove would like to be the first LNG export terminal to be approved, constructed and operated on the West Coast of the continental United States, and thus positioned to mainly serve markets around the Pacific Rim." So this project is all about the applicant's desire to make money regardless of the consequences, and it is clear that it is virtually impossible to avoid or minimize the

IND242-12  
Cont.

IND242-13

## IND242 Continued, page 7 of 8

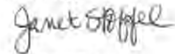
IND242-13 Coos Bay averages 63 inches of rain per year. That is not a drought. Water needed for the terminal, and the sources for this water, are discussed in section 4.4.1.1. Climate change is addressed in section 4.14.3.12.



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negative impacts of a mega-project like this. The thousands of people affected by Jordan Cove's desire never had a chance to vote and decide if this is what they wanted. The people are angry and rightfully so. The FEIS should address all of the concerns of the multitudes of people who are filing comments with the FERC, including the huge issue of Public Benefit. If you are honest in your assessment of this project, I think you will conclude that there are **virtually no public benefits and massive liabilities**.

Sincerely,



Janet Stoffel

IND242-14

**IND242 Continued, page 8 of 8**

IND242-14 The U.S. Congress, which was elected by the people, decided to convey the power of eminent domain to private companies that receive a Certificate from the FERC when it passed section 7(h) of the NGA in 1947. As explained in the DEIS, the construction right-of-way would be restored after pipeline installation, and landowners would be compensated for any damages. The EIS analyses environmental effects of the Project, not the need for the project. The Commission will use the FEIS and other analyses for consider the need for the project, see section 1.3.

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IND243

Betty McRoberts, Central Point, OR.  
In Reply Refer To:  
OEP/DG2E/Gas 3  
Jordan Cove Energy Project, L.P.  
Docket No. CP13-483-000  
Pacific Connector Gas Pipeline, L.P.  
Docket No. CP13-492-000  
FERC/EIS-0256D

My name is Betty McRoberts. My address is 1011 Rustler Peak Street, Central Point, OR 97502. I also am part owner of a family cabin in Coos County Oregon located at 56078 Goldbrick Road, Myrtle Point, OR 97458 in Dora, on the East Fork of the Coquille River. The LNG pipeline will travel past our Coos County property and through the community of Dora. I commented earlier on the Environmental Review for the project. Much has happened since that submission. I am commenting on your Draft Environmental Review.

I urge you to NOT approve the project. I realize your staff worked diligently to put this document together but unfortunately it is incomplete. You will receive many arguments in opposition to the project and I will not go into all of them in my opposition.

My reasons you must not approve are:

The environmental review did not take into account the impacts on the environment of increased extraction of Natural Gas. Likewise you did not take into account the impacts on the environment of the use of this Natural Gas which will be shipped out of Jordan Cove on 90 ships a year to be burned somewhere in our earth's atmosphere. This Natural Gas is not now being burned; if it is there is no reason for this project!! So by adding this project to the environment; both in the extraction of the Natural Gas and in the use of the Natural Gas, it is impacting the environment. This project cannot be studied in a vacuum. It must be studied as a segment of a larger project to our earth environment. Those days are gone where we can let one or two companies justify destruction of the environment in the name of greed. Our responsibility; no, your responsibility is to "leave this earth a better place for the next generation". If you can approve this needless project in order to promote the agenda of a large company at the expense of the earth's environment and the potential destruction of Oregon; you should resign from your decision making position.

There is no public benefit of this project. Because the Natural Gas will be exported there is no need for the supply of gas. In a world crisis we as the United States might be forced to use this Natural Gas in the future but otherwise we should work as a nation to restrict these types of fossil fuel developments. By exporting the Natural Gas to other countries we will raise the cost of domestic Natural Gas. Gas Producers would say they need this production to sustain low domestic prices. I disagree or I should say I do not believe them. I think this is key to this project. The public all over the country is starting to look at

IND243-1

IND243-2

## IND243 Betty McRoberts, Central Point, OR

IND243-1 As stated in 1.4.4 of the EIS, both the upstream production of natural gas and its use downstream after LNG is shipped from the terminal are outside the scope of the EIS because those activities are not regulated by the FERC.

IND243-2 There is no evidence that the Project would result in higher domestic natural gas prices. See response to IND37-4. The Commission would make a determination whether or not the Project would be in the public benefit in its Order issued after the FEIS is produced.

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these Private-Public situations with disbelief. Our elected officials are purchased by the large companies and then in turn vote to ease the way for these projects that are counter to the public good; projects which public officials used to be more diligent to guard against.

The few local jobs created by the project will be negated by the loss of manufacturing jobs moving overseas; exacerbated partially by the availability of this Natural Gas to these other nations who compete unfairly due to cheap labor.

The entire document is very difficult for the layperson to understand. It is apparent that it is incomplete. At the FERC hearing, which was overcrowded and difficult to hear, the answers heard more often than not were. "The company will submit later how they plan to deal with that"; "the company has not submitted that portion of the plan yet". This seems to be on purpose; it is so fragmented it is not understandable.

One thing, which is apparent, is the statement "because this is such a large project and covers such a long distance, each environmental impact is insignificant by itself in the larger scope of the whole project". This is not how environmental reviews work! The logging industry is a large project taken as a whole and you could say the same of it but this has never been allowed. If a logging road will have runoff into the streams it must deal with it, if it impacts the spotted owl they are not allowed to log. This is logging; an activity which has been for the public good of the people of Oregon. The current environmental regulations are a result of the abuses of the logging industry. People of Oregon want responsible logging; they do not want a Natural Gas Pipeline because they do not see the benefit to the citizens of Oregon or to the citizens of the world. They see destruction of the environment for the future generations.

The Environmental Review did not consider Environmental Justice. Most of the landowners whose land will be impacted are low income. Rural Southern Oregon is very poor. These landowners have all of their life savings tied up in this little piece of property. The payment of the easements is worth a mere few thousand dollars. The result for the landowner is they left with a worthless piece of property. Even if you are adjacent to the property where the line is passing, your property will be worthless now. When we first heard about the Natural Gas project we sold our home in North Bend, OR, where we were going to retire; across the bay from Jordan Cove. We own four acres in Dora, OR and now are told by the Realtor we must disclose the coming pipeline to prospective buyers. We were going to live there but are now trying to sell the land. This is the land our family has owned since 1907.

Coos Bay has been struggling since the decline of logging and has settled into as a small coastal fishing community with a fairly substantial tourist industry. The Jordan Cove project will kill the remaining fishing fleet. The tourist fishing will be dead due to the damage to the waters and the mere fact that 90 LNG ships in the bay will be quite a problem for folks who can only get a day now and then to run over to fish.

**IND243 Continued, page 2 of 4**

- IND243-3 There is no evidence that the Project would cause jobs to be lost. See section 4.9 of the EIS.
- IND243-4 The EIS is complete and understandable. It includes recommendations for additional information that must be submitted before construction could begin.
- IND243-5 The proposed Project is not a logging project.
- IND243-6 Environmental justice concerns along the pipeline route are evaluated in section 4.9.2.9. Potential impacts to property values are assessed in section 4.9.2.3.
- IND243-7 Commercial and recreational fishing are discussed in section 4.9, and we find that effects to fishing boats would be temporary and short term. The sum of time that LNG vessels would be transiting within Coos Bay would be about 1.3 percent of daylight hours in a year.

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An issue of Environmental Justice is the standard with which the pipeline is being built. The company is being allowed to install the pipeline to a lower safety standard. This is allowed because the area is rural and less people will die. But this should not be allowed because there is great wealth of natural resources in Southern Oregon which will be destroyed and consequently destroy the entire area's economy.

IND243-8

There is another component of Environmental Justice; the homeowners who are consumers of Natural Gas many times are low or middle income. These people will be impacted by the increasing rates caused by this Natural Gas being shipped overseas.

IND243-9

The last form of Environmental Justice to be considered with this project is the cost of mitigation of global warming. The developed nations and the United States primarily, will be responsible for helping those poor nations who cannot pay to mitigate the effects. The American Taxpayers will be on the hook for this cost; which is already quantifiable and certainly to grow. The company who is putting in the pipeline and the Jordan Cove facility, who will reap the profits from the sale of the Natural Gas for maybe 20 - 40 years of destruction to the environment; they will be long gone and will not be liable for the damage they caused. You as the committee will not be liable; you will be in your grave. Your children and grandchildren and all children and grandchildren of the developed nations will be responsible for this cost. This will be paid through taxes; also more of a burden on lower and middle income people. We as a nation are moving in this country in having developers pay System Developer Charges to install infrastructure but we still have not moved far enough to charge those developers for the ongoing maintenance of this infrastructure. This is the same principle except on a much larger scale. There are whole islands in the Pacific, which will be underwater and the entire nation will need to be moved. There will be widespread damage to the developing nations of the world and this is an Environmental Justice issue as well. This cannot be ignored as you have done in this review.

IND243-10

The Jordan Cove facility and the pipeline route in Coos County and Klamath County are located in fairly active seismic zones. There have been predictions of a large major earthquake in the area. More importantly, there are areas around Coos County, which are very active. Driving from Myrtle Point to Roseburg on the old Historic Stage Coach Road through Dora and following along the river and one usually needs to get out and move rocks out of the road. Many times the road will slide and requires the County road crew to come out and clean it. This is a daily occurrence. The soil is very unstable and sinking and rising all the time. This does not seem like a great place to put a pipeline. The point I made earlier about not trusting this document; it seems like the company installing the pipeline did all the work and submitted it to you. I might be skeptical if I were you. When Coos County contracted to install a 10" Natural Gas Pipeline to the coast in 2004-2005 it turned into a major fiasco where it traversed through Dora. There were numerous frackouts of streams and rivers. There is an environmental firm still working to fix the problems all these years later. What kind of damage to our fish and aquatic wildlife occurred with that little project? What kind of massive damage will happen this time? They did not hire locals;

IND243-11

## IND243 Continued, page 3 of 4

IND243-8 As stated in section 4.13 of the DEIS, the FERC does not establish safety standards for pipelines; those standards are set by the DOT. It is outside the authority of the FERC to revise or alter the DOT safety standards.

IND243-9 Environmental justice is discussed in section 4.9. Issues considered outside the scope of this EIS, including the Department of Energy decision to permit natural gas export, are discussed in chapter 1.

IND243-10 See our response to comment IND1-1.

IND243-11 Potential impacts from seismic activity are discussed in section 4.2.

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**IND243 Continued, page 4 of 4**

instead brought in a company from Texas whose business it is to put in pipelines. They did admit during the litigation following they did not realize the soil conditions they were getting into when they took the job! These are the pipeline experts!

The BLM and Forest Service are changing their plans to accommodate the pipeline. My question is why? An industry as important to Oregon as logging and the people of Oregon have whittled out these plans over the years. There is nothing here for the people of Oregon. The people of Oregon who rely on the Government lands for hunting and fishing will be locked out because of the required security surrounding the pipeline. The logging companies have already locked out the people from their lands unless you pay for a permit to hunt. There are low-income rural people in Oregon who rely on the game they take to feed their families. This is a poor region. This pipeline is not going to help those people financially. The people of Coos Bay are being bribed by the Pipeline and Jordan Cove Company; this is not going to filter down to the rural folks who will lose so much if this project goes forward.

Please do not let them ruin our environment, our air, our waterways, our fish runs, and our habitats, which we have strived hard to protect while proceeding with a moderate amount of logging. Please do not be so short sighted to put upon our children and grandchildren this horrible burden when it will benefit so few. Those who are greedy are not able to police themselves. This is why past Presidents have set aside National Parks, wilderness areas, passed the Clean Act, created the EPA, etc. Do not abuse your power.

IND243-12

IND243-12 Section 4.8.1.3 of the EIS discusses recreation on federal lands. No decisions have been made concerning the proposed amendments to LMPs. Changes are being considered consistent with the direction in the Energy Policy Act passed by Congress in 2005. No federally managed lands would be permanently closed to hunting or fishing as a consequence of the PCGP project.

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IND244

JOYCE & PAUL CHAPMAN  
22352 HIGHWAY 62  
SHADY COVE, OR 97539  
541.878.3890  
[Chapjp01@msn.com](mailto:Chapjp01@msn.com)

February 8, 2015

To: FERC  
Re: Draft EIS for Jordan Cove Liquefaction and Pacific Connector Pipeline Projects (Docket Nos. CP13-483-000 and CP13-492-000)

Gentlemen:

I live in Shady Cove, Oregon, approximately a mile down river from where the Pacific Connector Pipeline (Pipeline) is proposed to cross the Rogue River. My husband, Paul Chapman, and I strenuously object to the Pipeline on the following grounds:

Eminent Domain: The concept of eminent domain is based on the taking of private land for *public good*. The residents of Oregon and specifically, Shady Cove, will not benefit by having this Pipeline go forward. The benefactor is a private Canadian company who will make millions, perhaps billions of dollars in profit while the taxpayers and private landowners bear the risks of various forms of destruction associated with this project.

My neighbors would have their property taken from them with minimal recompense. Their properties would be scarred in perpetuity and property values diminished. In some cases, their properties would become uninhabitable.

Risks: While the applicants for this project purport to have come up with plans to clean up *after the fact* of leaks, explosions, fires and earthquakes, we do not believe appropriate consideration has been given to the following.

Shady Cove and its surrounding forests are at high risk for fire simply by virtue of its natural location. The forests are home to all sorts of wildlife, including the endangered Spotted Owl,

## IND244 Joyce and Paul Chapman, Shady Cove, OR

IND244-1 Comment noted.

IND244-2 See the response to IND38-5. The Commission Order (not the EIS) would determine whether or not there is a public benefit from the Project.

IND244-3 As explained in section 4.13, it is highly unlikely that the pipeline would explode or cause a fire. The DOT, not the FERC, sets HCA. Potential impacts from seismic activity are discussed in section 4.2. Section 4.4 addresses water resources, section 4.5 discusses timber, and section 4.6 deals with wildlife.

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and are a source of income for the residents of our community through sustainable logging. This area should be considered a High Consequence Area (HCA) because of the unusually sensitive environment and because the pipeline is proposed to cross under the Rogue River, a single source drinking water supply and home to various species of endangered fish. Drinking water for hundreds of Shady Cove residents comes from the Rogue River through the private Hiland Water Company and the Rogue River is the source of drinking water for the entire City of Medford.

IND244-3  
Cont.

An accident during construction under the Rogue River, a leak after construction is finished, and/or a resulting explosion would decimate Shady Cove and destroy the water supply for hundreds of residents of Shady Cove and all of Medford. The river habitat for endangered species and the forest habitat for endangered wildlife would be irreparably harmed. The resulting destruction in Shady Cove caused by fire would be difficult to fight. Shady Cove has a volunteer fire department and only one or two water tanker trucks. That resource is grossly inadequate for the type of fire caused by a gas explosion sending a fireball hundreds of feet into the air.

IND244-4

Will FERC require applicant to fund in advance an appropriately staffed, full time fire department and provide appropriate firefighting equipment?

Despite safety plans, construction plans and risk assessments approved by FERC, accidents of a serious nature still occur with regularity. According to a letter to Congress dated August 27, 2013 from the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (Report), p. 7, Paragraph G, "Hazardous liquid pipeline operators reported 5,094 accidents from 1991 through 2009 and 2,653 exceeded PHMSA's significant incident threshold. The PHMSA determined that 13 accidents from this time period occurred at inland water crossings. All 13 failures exceeded PHMSA's significant incident threshold. ...A depletion of cover, sometimes in the waterway and other times in new channels cut by flood waters, has been a factor in all 13 of these failures."

In Paragraph H, p. 8 of the Report it states "...Hazardous liquid pipeline operators reported 972 accidents from 2010 through October 2012, and 352 exceeded PHMSA's significant incident threshold. Seven of these accident reports indicated that the pipeline crossed a body of water. Two occurred in 2010 and five occurred in 2011.

A depletion of cover in the waterway has been a factor in three out of seven failures. All three of the accidents where depletion of cover was a factor exceeded PHMSA's significant incident threshold..."

## IND244 Continued, page 2 of 4

IND244-4 Pacific Connector proposes to cross under the Rogue River at great depth using an HDD, to avoid impacts on water sources for the communities of Shady Cove and Medford, and also avoid impacts on river habitat and associated species, as explained in sections 4.4, 4.5, and 4.6. As indicated in section 4.13, it is highly unlikely that the pipeline would explode or cause a fire. Pacific Connector has produced an Emergency Response Plan, Fire Prevention and Suppression Plan, and Safety and Security Plan. In addition, DOT safety regulations require the pipeline company to coordinate with local responders. Pacific Connector would provide appropriate training to local emergency service providers before putting the pipeline into service.

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The Report goes on to identify that one incident occurred in a buried pipeline water crossing that had a defective weld. Two incidents resulted from internal corrosion; one was caused by scouring during flooding; and two were caused by failures at the girth weld as a result of external loading caused by exposure to flood conditions. Clearly, despite best laid plans, inspections and analysis, poor construction and accidents occur, especially, it would appear, in flood zones.

The Rogue River has been known to flood. FEMA has strict regulations regarding building in flood zones and above flood plains. FEMA recently revised flood zone maps and increased enforcement of building codes in Shady Cove because of the perceived danger of flooding.

Crossing the Rogue River with an LNG Pipeline puts the surrounding communities and the Pipeline itself at high risk for damage due to flooding. A leak and resulting explosion at a crossing of the Rogue River would cause devastation to our community that could never be repaired. Homes would be destroyed. Forests and the jobs associated with them would be destroyed for generations to come. Endangered species would be killed and perhaps never regain a foothold. The water supply for Shady Cove and the City of Medford could be cut off for years. There is no compensation plan that could fix this sort of damage to this beautiful area and the people who live in it.

Another risk that we feel would be difficult if not impossible to prevent and difficult to mitigate after the fact, is the potential damage to the wells in Shady Cove. The geology of this area is such that it is impossible to predict what will happen to the water supply of existing wells during drilling. It is entirely possible that water supplies could be disrupted or re-routed because of the drilling or an accident during drilling. It is well within reason to believe that existing wells could have their water supplies diminished or cut completely as an unintended consequence of drilling for such a huge Pipeline. In Shady Cove, if you are not on the private Hiland Water system, you must have a well. Will FERC require applicant to pay all costs of hooking up to the Hiland Water system (supplied by the Rogue River) if the water supply to wells in the area are diminished or cut off completely?

We have focused on the Rogue River. However, this project anticipates 400 water crossings, thereby exponentially increasing the risks of significant incidents along the Pipeline. The few million dollars that applicant proposed to give to local governments in taxes cannot offset the huge risks, we as residents and taxpayers are being asked to bear. A natural gas pipeline accident and explosion in 2010 in San Bruno, California resulted in \$375,590,512 in property damage according to PHMSA. We could not afford such damage. You could not replace our

IND244-5

IND244-6

IND244-7

## IND244 Continued, page 3 of 4

IND244-5 The Pacific Connector pipeline would transport natural gas in a vapor state, not LNG. The pipeline would cross under the Rogue River at great depth using an HDD, and would not be susceptible to flooding. See response to IND244-4.

IND244-6 See Pacific Connector's Groundwater Supply Monitoring and Mitigation Plan (filed with the application and available on elibrary). If monitoring determined after construction that there has been an effect to groundwater supply (either yield or quality), Pacific Connector would provide a temporary supply of water, and if determined necessary, would replace the affected supply with a permanent water supply. Mitigation measures would be coordinated with the individual landowner to meet the landowner's specific needs. In addition, during easement negotiations the landowner can work with Pacific Connector on siting the line within individual properties to increase the distance between the pipeline and any springs or wells.

IND244-7 Impacts on waterbodies are discussed in section 4.4. Pipeline safety and risks are discussed in section 4.13. The incident in San Bruno occurred along an older, non-jurisdictional pipeline that was regulated by the State of California, not the FERC.



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**IND244**      **Continued, page 4 of 4**

homes, forests, jobs, endangered species, water or wildlife for generations. There is no price tag on such things. We urge you to deny the permit for this project.

IND244-7  
Cont.

Sincerely,  
Joyce Chapman  
Paul Chapman

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IND245

To: Kimberly Bose  
FERC  
888 First Street NE, Room 1A  
Washington DC 20426

From: Dr. Jan Hodder  
63840 Fossil Point Road  
Coos Bay OR 97420

February 1, 2015

Re: Docket No. CP13-482-000 and Pacific Connector Gas Pipeline LP (Pacific Connector) in Docket No. CP13-492-000.

**Comments on the Draft EIS**

**Comment:** The Draft EIS does not consider sufficient alternative ways to meet the need. **Details to support the comment:** NEPA regulations call for a rigorous exploration and evaluation of all reasonable alternatives, not just those desirable by the applicant. Although the DEIS states that "Alternatives considered in this EIS include the no action alternative, system alternatives, LNG terminal alternatives, pipeline route alternatives, and aboveground facilities alternatives." (page ES-3) there are only two alternatives presented for public consideration:  
1. No action;  
2. Implementation of the Jordan Cove project.

IND245-1

All other alternatives mentioned in the DEIS were summarily rejected for consideration as alternatives with no detailed analysis of why rejected. The scoping comments provided by the Environmental Protection Agency (EPA) on October 19, 2012 states, "...we recommend discussing the proposed project in the context of the larger energy market, including existing export capacity and export capacity under application to the Department of Energy, and clearly describe how the need for the proposed action has been determined." Discussion of this recommendation and the public need for an LNG export terminal are missing in the DEIS. Currently the DEIS reads as a justification document for building the Jordan Cove and Pacific connector projects and reads as a foregone conclusion that the these projects are the only one that fulfill this undefined need. Alternatives presented are devoted to those within the scope of the project, such as small reroutes of the pipeline, rather than a substantial discussion of real alternatives to the project itself.

IND245-2

The Jordan Cove DEIS dismisses the fourteen LNG terminals on the East and Gulf coasts, the Alaska LNG project and the Oregon LNG project without providing a rigorous and objective analysis as required by NEPA regulations. Likewise, the DEIS dismisses the import LNG facilities in Mexico but it does not consider alternatives for LNG export planned on the Canadian west coast and how gas could be transported to those sites. The DEIS states, "Oregon LNG Project can meet the same basic objectives of the Jordan Cove LNG Project, of constructing and operating a West Coast LNG export terminal that could service foreign markets in Asia." This statement indicated that the Oregon LNG project at Warrenton should certainly be considered as a viable alternative and should be analyzed by a rigorous and objective manner as require by NEPA. Information in the Oregon *LNG Bidirectional Project Resource Report 1 — General Project Description* Prepared for LNG Development Company, LLC (d/b/a Oregon LNG) and Oregon Pipeline Company, LLC indicates that, when compared to Jordan Cove, this site requires much less infrastructure, has a lesser environmental

IND245-3

**IND245 Dr. Jan Hodder, Coos Bay, OR**

- IND245-1 Alternatives to the proposed action are presented in Chapter 3 of the EIS.
- IND245-2 The DEIS is not a decision document, and does not justify the Project. The Project has not yet been authorized. The Commission would determine if there is a need for the Project in an Order that would be issued after the FEIS is produced.
- IND245-3 Chapter 3 of the EIS explains why LNG terminals on the East and Gulf Coasts would not meet the objectives of the Project. Our discussion of the Oregon LNG project in section 3.2.2.4 of the DEIS concludes that it may also meet the project objectives. The effects of the Oregon LNG proposal would be analyzed in a separate EIS.

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impact. There is also no need at this site for a power plant needed to liquefy gas, energy for liquefaction is available from renewable sources close to the project, and the pipeline is much shorter.

IND245-3  
Cont.

EPA scoping indicated that the South Dunes Power Plant power plant and the Jordan Cove export facility are interdependent and interconnected as without power gas cannot be liquefied and if there is no gas to liquefy there is no need for a power source. Thus the impact of building and operating the South Dunes Power plant, and an analysis of alternatives to the construction of the power plant for the power supply should be included in the DEIS. An on-site power plant is not the only way to provide power for gas liquefaction. There are however no alternative recommendations in the DEIS for how power should be supplied to the Jordan Cove export facility. One alternative to consider is the construction of a high power voltage line that feeds power from the already existing grid.

IND245-4

A particularly strange part of this DEIS is the inclusion of a berth/slip for a ship that has nothing to do with the Jordan Cove project. This west side berth is, "planned for other commercial ships, assuming the Oregon International Port of Coos Bay (Port) follows through on its plans to provide for large deep-draft container ships." (page ES-4). No rationale is included as to why this action is lumped in this DEIS. If this berth had been proposed independent of the LNG terminal would not a separate EIS have had to be prepared? The justification for this slip in the DEIS is that "Building a smaller slip now and expanding it in the future to meet the Port's goals in a separate project could result in greater resource disturbance". As there is nothing but speculated use of this slip in the DEIS an alternative for this action should be that it is not included in the plans for the Jordan Cove project. The finding that "Therefore, we do not find that a smaller slip would offer significant environmental advantage over Jordan Cove's currently proposed marine slip design" has no basis in fact and should be excluded or if included further substantiated in the DEIS. If the slip is included the DEIS should address any shore side impacts that would undoubtedly occur if we presume that the construction of the western berth is going to result in its use by some entity. The map (Figures 2.1-2 and 2.1-5) shows the western slip is bounded on its northern side by the LNG tanks and on the western side by the containment berm and the wetlands of Henderson marsh. No consideration has been given in the DEIS as to how access to the western slip would occur. The DEIS mentions that a wind turbine construction facility might use this site which implies that the Henderson Marsh will need to be developed. The DEIS does not provide any information on the impact of this type or any other development. The DEIS implies that Jordan Cove has considered safety aspects of the LNG plant by purchasing sufficient land to ensure an exclusion zone. No consideration however has been given in the DEIS to security issues associated with the LNG plant that a merchant ship with unknown crew of unknown national origin might present, or any facility that would be built adjacent to the western slip.

IND245-5

IND245-6

IND245-7

IND245-8

IND245-9

**Comment:** NEPA directs that the DEIS needs to include discussions of the direct, indirect and cumulative effects of the proposed project and alternatives.

**Details to support the comment:**

Because the preferred alternative includes building large, multi-user slips with access channels the DEIS should contain an analysis of the use of the Coos Bay channel from the ocean to the multi-user slips dock (~7.3 miles). This includes the dredging and its associated environmental issues that would be required for the larger vessels that could be accommodated in the Jordan Cove and Port of Coos Bay's slip. (pg 3-15), and the concern for how the Port will comply with the water way safety required to accommodate LNG tankers as they make their way to the dock.

IND245-10

The EPA Scoping recommended, "that the EIS consider mitigation methods and reasonable alternatives to reduce action related greenhouse gas emissions and include a discussion of cumulative effects of greenhouse gas emissions related to the proposed action" and consider, "the difference in emissions associate with alternatives" The DEIS does none of this. As no alternatives are presented in

IND245-11

## IND245 Continued, page 2 of 4

IND245-4 The impacts of building and operating the South Dunes Power Plant are analyzed in this EIS. See section 3.3.2.3 for a discussion of alternative electric power sources.

IND245-5 The multi-user facility is no longer being considered. The proposed action under this NEPA analysis includes a single-use slip and access channel that solely supports LNG operations. The 800-foot slip width would be needed in order to be able to move an LNG vessel off of the LNG berth on the east side of the slip in the event of an incident within the LNG upland facilities that might threaten the safety of the LNG vessel at berth. Having the 800 foot slip width provides the flexibility needed for tugs to move the LNG vessel away from a hazard at the terminal or at the LNG loading dock to the relative safety of the west side of the slip. All references to a multi-purpose facility, mixed-use facility and/or alternative use in the DEIS, appendices and other supporting documents have been deleted from the FEIS.

IND245-6 There is no western berth proposed, and Henderson Marsh would not be impacted. See response to IND245-5.

IND245-7 As explained in section 2.2.5, another company, Principal Power, is proposing to stage the construction of wind turbines on the west side of the Jordan Cove marine slip, and that action may impact Henderson Marsh. The Principal Power action is independent and separate from the Jordan Cove LNG terminal. The Principal Power proposal has not yet been funded or approved by the appropriate agencies (it does not need FERC approval). The environmental impacts of the Principal Power proposal are considered in this EIS under the Cumulative Impacts section at 4.14.

IND245-8 The Coast Guard would be responsible for the safe use of the waterway. See response to IND242-4.

IND245-9 The EIS does include an analysis of direct, indirect, and cumulative impacts. See the discussion in section 1.4, and the discussion of cumulative impacts in section 4.14.

IND245-10 The Jordan Cove Project does not include additional dredging of the Coos Bay navigation channel. As explained in section 2.2.5, the potential deepening and widening of the navigation channel is an action proposed by the Port, and is separate and not related to the Jordan Cove proposal.

IND245-11 See the response to comment IND1-1.

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the DEIS the only information comes from the operation of the LNG plant and the associated power plant. No reasonable alternatives are presented as to how emissions could be reduced. One alternative that could be explored would be hydro and wind power delivered by a high voltage line.

IND245-11  
KONE

On December 18, 2014, the White House's Council on Environmental Quality (CEQ) released revised draft guidance for public comment that describes how Federal departments and agencies (e.g. the Federal Energy Regulatory Commission) should consider the effects of greenhouse gas emissions and climate change in their NEPA reviews. (<http://www.whitehouse.gov/administration/eop/ceq/initiatives/NEPA/ghg-guidance>) The draft CEQ guidelines state that, "agencies should consider both the potential effects of a proposed action on climate change, as indicated by its estimated greenhouse gas emissions, and the implications of climate change for the environmental effects of a proposed action. The guidance also emphasizes that agency analyses should be commensurate with projected greenhouse gas emissions and climate impacts, and should employ appropriate quantitative or qualitative analytical methods to ensure useful information is available to inform the public and the decision-making process in distinguishing between alternatives and mitigations. It recommends that agencies consider 25,000 metric tons of carbon dioxide equivalent emissions on an annual basis as a reference point below which a quantitative analysis of greenhouse gas is not recommended unless it is easily accomplished based on available tools and data." The CEQ 2010 guidelines on carbon emissions also contained a similar recommendation. The Jordan Cove project is seeking state permission to release 2.1 million metric tons of carbon dioxide and equivalents annually, equal to 3 percent of the state's greenhouse emissions during 2013. This far exceeds the CEQ guidelines and thus should be addressed in the DEIS. The DEIS makes no evaluation of greenhouse gas emissions that are associated with the project but do not occur on site at Jordan Cove. These include the emissions that result from gas extraction, venting and transport loss.

IND245-11

The cumulative impacts of the pipeline corridor need to be further addressed in the DEIS.

**Comment:** There are several incomplete and incorrect assumptions in the analysis of the proposed action. **Details to support the comment:** The DEIS provides inadequate information on the effects of the pipeline installation in the estuarine areas of Coos Bay. The DEIS indicates that "Pipeline construction in Coos Bay would be limited to the ODFW recommended in-water work window between October 1 and February 15, when tides are lowest". With the lowest tides (all of which are after dark in this time period) come the highest tides and maximum tidal flow which has the most impact on sediment movement. There is no assessment in the DEIS as to how any increased turbidity will affect the commercial oyster growing sites in the upper part of the bay, and no mitigation measures for any potential oyster impacts if turbidity levels exceed permitted amounts and affect the oyster beds. The use of the marsh excavator will likely have impacts greater than just on the pipeline route with potential to impact salt marsh, mudflat and submerged aquatic vegetation as it moves to the pipeline location. The DEIS does not address this potential.

IND245-9

IND245-14

The turbidity measurements presented on page 4-568 are for the Charleston channel, which is drained by South Slough, and is a water body that is partially independent of the main part of Coos Bay and thus these turbidity measurements are unlikely to represent the actual turbidity that will be experienced during the project implementation.

IND245-10

The DEIS statement on page 4-250, "It should be noted that although Japan has more LNG terminals than any other industrial nation, none of those facilities were significantly impacted by the 2011 Tohoku earthquake" is incorrect as the Sendai City Gas Shimmato LNG facility, 80 miles from the earthquake's epicentre, was damaged and flooded by the tsunami (Japan Energy Brief, March 2011).

IND245-18

## IND245 Continued, page 3 of 4

IND245-12 See the response to IND1-1.

IND245-13 We disagree. The proposed action as described in chapter to is complete and accurate.

IND245-14 We disagree. Adequate information about the effects of pipeline installation across the Coos Bay estuary is provided in section 4.4.2.2. Estimated turbidity levels generated when installing the pipeline across Haynes Inlet are discussed in section 4.6.2.3 (note the modeling results). Section 4.9.2.8 states the crossing area in Haynes Inlet would mostly avoid oyster beds; however, it also states that the crossing method (open cut) may result in turbidity that could affect commercial oyster beds. Additionally see responses to CO39-49, -51, -53, and -54.

IND245-15 Turbidity measurements in Coos Bay are discussed in sections 4.4.2.1, 4.4.2.2, 4.6.2.2, and 4.6.2.3.

IND245-16 The text in section 4.2.1.3 in this FEIS has been modified to now read: "The tsunami generated by the 2011 Tohoku earthquake did cause damage to one LNG terminal in Japan (the Minato Gas Plant). The low lying LNG terminal is located in Sendai and was not well protected from tsunami inundation. Even though it was subjected to inundation depths of 4 meters, there was no damage to the LNG tanks, no release of LNG, and no safety hazard was reported. The Jordan Cove LNG terminal would be both elevated and well protected by tsunami berms."

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**Comment:** NEPA requires that the DEIS will contain a description of the environment that would be affected by the various alternatives.  
**Details to support the comment:** The description of the affected environment in the Jordan Cove DEIS is incomplete as it contains no information about the effect on the extraction of the gas that will be exported by this facility.

IND245-17

**Comment: Need for a supplemental draft EIS.**

In Chapter 5 of the DEIS there are sixteen requirements that "Prior to the end of the comment period on the draft EIS" that Jordan Cove and/or Pacific Connector are required to address. As the entities may choose to submit their responses on the last day of the comment period it would be impossible for the public to respond to these details. The outcomes of the required comments must be available for public review. A supplemental draft EIS as outlined in 40CFR Section 1502.9 should be produced for public comment on the sixteen requirements.

IND245-18

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**IND245 Continued, page 4 of 4**

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IND245-17 We disagree. The EIS contains a complete description of the affected environment. Section 1.4 of the EIS explains how it is organized. Our text reads: "The EIS describes the affected environment as it currently exists, discusses the environmental consequences of the Project, and compares the Project's potential impacts to a reasonable range of alternatives." While there are no headings that say "Affected Environment or Current Conditions," the current conditions are discussed at considerable length for each resource in chapter 4. As stated in section 1.4.4, the EIS does not contain information about the extraction, production, or gathering of natural gas, because those activities are not regulated by the FERC.

IND245-18 A supplemental DEIS is not necessary. The FERC staff considered all comments received up until the time the FEIS was written and produced. Although this was months after the applicants filed the studies the DEIS requested prior to the end of the comment period, in fact during that time we received virtually no comments on those additional reports or data.

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IND246

**IND246**     **Corin Whittmore, Roseburg, OR**

IND246-1     See the responses to IND1-5 and IND1-6.

Corin Whittmore, Roseburg, OR.  
Please do not allow the pipeline to be built through Oregon land. There  
are many reasons why this project should not go forward. Here is just  
one:  
FERC failed to consider the impacts of the 230 mile long pipeline needed  
to feed the Coos Bay LNG terminal. For instance, FERC failed to consider  
impacts to over 300 Oregon landowners who are facing eminent domain.  
FERC erroneously claims there is such a big "public interest" in this  
project, FERC will give the right to a foreign country to condemn Oregon  
land for their pipeline.  
Thanks for your consideration,  
Corin Whittmore

IND246-1

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**Comments on the Executive Summary**

Page ES-2

**I request that the description of the Proposed Action be modified to include reference to the non-LNG commercial ship berth that the applicant has identified as being part of the Proposed Action.**

IND247-1

Paragraph 2 ES-4

The conclusion embodied in the final sentence of this paragraph is not supported by the evidence provided earlier in this same paragraph. **I request the final sentence be removed from the Executive Summary and from other locations where this conclusion is mentioned in the document.** I have included a more thorough discussion related to this request later in these comments.

IND247-2

Paragraph 3 ES-4

The Executive summary and the DEIS conclude that it will be impractical to build a smaller slip than the one proposed because the applicant has proposed a multi-user slip. The DEIS has failed to substantiate this conclusion.

**I request that the EIS provide information to substantiate the assertion that the goals of the project would be impractical or unattainable if a smaller, single purpose LNG vessel terminal were constructed.**

Should the above requested analysis demonstrate that a multi-purpose slip is essential to the attainment of the stated purpose and goals of the proposed project (provide a new West Coast export point to deliver western Rocky mountain gas mostly to Asia), I request the following additional analysis be included in the EIS:

IND247-3

- 1) The EIS should include an evaluation the full range of impacts linked to the proposed multi- purpose terminal in addition to the evaluation of the impacts associated with the LNG terminal construction, operation, and maintenance.**
- 2) The impacts of constructing and operating the proposed multi-purpose terminal should be compared to alternative means designed to meet the objectives including comparing the impacts of constructing and operating a single purpose cargo terminal and a single purpose LNG export terminal at separate locations in Coos Bay.**

Paragraph 2 ES-10

The DEIS identifies several major work products that are to be concluded before the project could be constructed. This paragraph identifies a federal consultation process leading to a Biological Opinion that has not been completed. While I support the recommendation summarized in this paragraph, I believe it is premature to circulate the DEIS for public comment prior to the issuance of a biological opinion.

IND247-4

The biological opinion referenced in this paragraph, and other findings such as the outcome of consultation with the FAA should be included in the DEIS in order to disclose the full range of impacts of the project as judged by the professionals charged with preparing and evaluating this

**IND247 Michael Graybill**

IND247-1 See the response to IND245-5.

IND247-2 The Executive Summary is just that, a summary. The analysis is in the body of the DEIS. The statement in the Executive Summary is supported by the analysis in section 3.2.2.4.

IND247-3 See the response to IND245-5 and the explanation in section 3.3.2.2 of the EIS.

IND247-4 The FERC will not be issuing a supplemental DEIS. It is typical and common for some studies to be completed both after an EIS is finished, and after the Commission has issued an Order. The EIS recommends a condition for the Order that states that construction cannot begin until after applicable federal authorizations, including a BO from the Services and finding on aircraft hazards by the FAA, have been obtained.

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proposal. As a result, **I request that FERC issue a supplement to the DEIS that includes the Biological Opinion identified in this paragraph.**

IND247-4  
cont.

#### Comments on Chapter I of the DEIS

##### Regarding 1.1.2 (current proposals)

**I request that the bulleted list of Non-Jurisdictional facilities associated with the export terminal be modified to include reference to the proposal to construct a non-LNG commercial ship terminal as a component of the LNG tanker berth and tug mooring complex.** The commercial ship berth is referenced elsewhere in the DEIS as being a non-jurisdictional facility. It should also be identified as one in this paragraph.

IND247-5

##### Regarding 1.3 (purpose and need for the project):

This paragraph clearly demonstrates that as part of its review of the proposal, the Commission will determine if this project is in the public interest. The DEIS lacks a discussion of the criteria, or process that the Commission will use to determine if this project is in public interest. This section appears to be the only location in the DEIS to reference this important aspect of the FERC's decision making process. Because the DEIS is a public review document and because a public interest determination is so clearly central to the outcome of the FERC's evaluation of the Jordan Cove Proposal, **I request that the DEIS include a more thorough discussion of how the FERC will make a public interest determination.**

IND247-6

##### Section 1.4.1 Purpose and Scope of FERC's Action

The focus for this EIS is (and should be) an evaluation of the benefits and risks linked to the applicant's proposed alternative; to construct a LNG export facility in Coos Bay. In addition to an analysis of the alternative proposed by the project applicant, NEPA regulations also require the FERC to compare the proposed alternative to alternatives other than the one proposed by the project applicant.

IND247-7

Elsewhere in this document the applicant has identified the multi-user ship terminal as part of its application. **I request that the second paragraph of this section of the DEIS include reference to the non-LNG ship terminal as being among the non-jurisdictional facilities supporting the FERC jurisdictional facilities that are to be evaluated as part of the EIS.**

##### Comment on Section 1.4.4 Issues considered outside the scope of this EIS

The second to last paragraph of this section includes the statement: "As articulated in the September 18, 2008, Commission Order for the Bradwood LNG import project in Docket No. CP06-365-000, the FERC does not engage in regional planning exercises that would result in the selection of one terminal location over another". I do not contest this statement.

IND247-8

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- IND247-5 No non-jurisdictional, non-LNG related commercial berth is proposed at the Jordan Cove terminal. See response to IND245-5.
- IND247-6 The EIS is not a decision document, and will not make a finding of public interest. See responses to IND3-1 and CO1-5.
- IND247-7 See response to IND247-5.
- IND247-8 Alternatives to the Project, including siting the terminal, are evaluated in chapter 3. See the discussion for Oregon LNG in 3.2.2.4, which concludes that this alternative could also meet the project objectives. However, the effects of the Oregon LNG proposal are being analyzed in a separate EIS. The FERC's historic practice is to evaluate each proposed project on its own merits and let the market influence which of the approved projects is built, if any.



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However, this statement should not be used as a reason to avoid inclusion a comparative analysis of the environmental impacts of one or more alternate locations in the analysis of alternatives section of this EIS. As stated in section 1.4 of this document and in NEPA implementation regulations, the purpose of NEPA and the reason the FERC is charged with preparing an EIS is to "evaluate proposed facilities and to identify reasonable alternatives to the proposed actions that will avoid, or minimize adverse effects on the environment" (see paragraph 1 section 1.4 of this document).

The September 18<sup>th</sup> 2008 Commission order should not preclude the FERC from comparing the environmental impacts of developing an LNG facility at different locations in the same region. In the current case, the applicant has stated a need to create a Pacific coast LNG outlet to make an abundant supply of western rocky mountain gas available to customers mostly in Asia" (see section 1.3 this document). Under NEPA, FERC has the obligation to evaluate alternatives in order to compare the environmental impacts of proposals for facilities.

The FERC is presently reviewing proposals to construct LNG export facilities at two separate port locations in Oregon; The proposed Jordan Cove LNG facility in Coos Bay and the Proposed Oregon LNG facility on the Columbia River in Warrenton. Both proposals involve liquefying and exporting North American pipeline gas to customers in Asia. These two proposals differ in several fundamental ways outlined later in these comments. The different setting and actions proposed by the individual applicants will doubtless result in each proposal having a distinct set of environmental impacts. A properly structured articulation and analysis of these alternative proposals and their associated impacts in the EIS should enable reviewers and the FERC to identify a preferred location that most effectively avoids or minimizes the adverse effects on the environment.

That FERC is reviewing proposals to construct and operate LNG facilities at two different Oregon ports suggests more than one Oregon port may be a suitable location to site an LNG export facility capable of meeting the need stated in this DEIS. **Because there appears to be at least two locations suited for the development of an LNG export facility, I request that this EIS include in the analysis of alternatives section, a comparison of the environmental impacts linked to constructing and operating the proposed Jordan Cove LNG facility and Pacific Connector pipeline with the environmental impacts of the proposed LNG facility and connector pipeline in the Columbia River.**

The purpose of this above requested evaluation of alternatives to the proposed action should be to provide a defensible response to the four bulleted purposes for preparing the EIS stated in the first paragraph of section 1.4 of this document. Namely:

- a description and evaluation of reasonable alternatives to the proposed actions that would avoid or minimize adverse effects on the environment;
- the identification and assessment of the potential direct, indirect, and cumulative impacts on the natural and human environment that would result from implementation of the proposed actions;

IND247-8  
cont.

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- the identification and recommendations for specific mitigation measures, as necessary, to avoid or minimize significant environmental effects; and
- the involvement of the public, other agencies, and interested stakeholders in the environmental review process.

Regarding Section 1.5 (Permits, Approvals, and Consultations)

The project description encompassed in Chapter 1 of the DEIS is 57 pages long. Nearly half (35 of 57 total pages) of the chapter intended to describe the proposed project is dedicated to Section 1.5 entitled "permits, approvals, and consultations". While I do not question the need for the project applicant to be aware of and address all appropriate federal, state and local laws pertaining to the project, it is not clear to me how inclusion of exhaustive listing of federal state and local laws and a summary of the applicants actions to address these requirements can be characterized as appropriate content in a chapter dedicated to providing a description of the project.

IND247-9

Section 1.5.1 is headed "Other federal Environmental laws. This section includes a 10 plus page Table 1.5.1-1 includes a listing and historic summary of the permit applicants correspondence with state, federal and local regulatory programs. Listing a table that includes state local and federal regulations in a section headed "other federal laws" appears to be an editorial oversight in the DEIS.

IND247-10

I request that the DEIS be modified to reduce the length of Section 1.5 to a length in keeping with other sections presented in the project description contained in Chapter one, If it is deemed necessary to retain an agency by agency catalog of regulatory programs and to present a historical summary of actions and communications between the project applicant and these various regulatory agencies I recommend moving this information (including Table 1.5.1-1 to an appendix and making reference to this documentation in the abbreviated narrative of section 1.5 retained as part of Chapter 1.

IND247-11

## IND247 Continued, page 4 of 16

- IND247-9 Chapter 1 is an introduction. A listing of laws, regulations, and agency approvals is appropriate as background for an environmental analysis. The proposed action and project facilities are described in detail in chapter 2.
- IND247-10 The title of the referenced table is correct.
- IND247-11 Comment noted. The length of this section is necessary to convey appropriate information.

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The comments below relate to the sufficiency of the analysis of the project alternative proposed by the applicant.

The DEIS does not provide an adequate analysis of two aspects of the applicant's proposal related to: 1) The construction and operation of the South Dunes power plant and; 2) The construction and operation of the non-LNG commercial ship berths. Numbers 1 and 2 (above) are part of the applicant's proposed alternative but in its present form, the DEIS does not provide sufficient information to evaluate the impacts of these aspects of the applicant's proposed alternative.

**I request that the DEIS include a more thorough analysis of the impacts linked to the above mentioned aspects of the proposed action and that these findings be included in the revised draft EIS.** This information will enable readers and decision makers to better understanding the full range of impacts linked to the construction of the South Dunes Power Plant and the non-LNG commercial ship berth that have been proposed by the applicant as part of the LNG export terminal project.

IND247-12

In the absence of a proposal to construct an LNG terminal at Coos Bay, any proposal to construct a 420 megawatt power plant or a terminal for large commercial vessels would doubtless receive much more critical attention than the giving to these projects in the DEIS. The DEIS identifies these two aspects of the proposed alternative as being "non-jurisdictional facilities" but this does not exempt the FERC from including an evaluation of the impacts of these projects. As the lead agency responsible for the development of the EIS, NEPA implementation regulations require lead agencies to consider the impacts of jurisdictional and non-jurisdictional aspects of proposed actions.

In addition to including the more thorough analysis of the applicant's proposed action referenced above, **I request that FERC include an evaluation of variations or modifications to the solution proposed by the applicant that could meet the objectives and purpose of the proposed project but with fewer impacts to the environment. The analysis requested here is not intended to be viewed as fully addressing the need to evaluate alternatives to the proposed action as outlined in the NEPA guidelines for the preparation of an EIS.** To support this request, I offer the following examples of how the EIS should be structured to evaluate how the proposed action could be modified to reduce the environmental impact.

IND247-13

Example #1 Evaluation of alternatives to the proposed commercial ship terminal

The DEIS fails to demonstrate how the construction and operation of a commercial ship terminal adjacent to the LNG ship berth contributes to the attainment of the purpose and objectives of the proposed LNG export terminal. The construction and operation of a new commercial ship berth will doubtless have impacts on the environment and the various socioeconomic factors being considered by the DEIS. The DEIS acknowledges that a commercial ship berth for Non-LNG vessels is part of the applicant's proposed alternative. The DEIS also acknowledges that construction of the additional ship berth will involve additional dredging and habitat impacts, yet

IND247-14

## IND247 Continued, page 5 of 16

IND247-12 We disagree. The EIS contains a detailed analysis of the environmental impacts of the construction and operation of the South Dune Power Plant. There is no non-LNG commercial berth at the Jordan Cove terminal; see response to IND245-5.

IND247-13 Alternatives are discussed in chapter 3 of the EIS

IND247-14 There is no non-LNG commercial berth at the Jordan Cove terminal; see response to IND245-5.

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only a cursory, narrative discussion of the impacts associated with dredging the commercial ship berth is included in the DEIS. The DEIS evaluation of the impacts of the commercial terminal is presently limited to the actual footprint of the berth to be used by commercial vessels. No discussion or analysis of the impacts associated with the *operation* of the proposed commercial ship terminal are included in the DEIS. This is insufficient.

NEPA regulations obligate the lead agency tasked with preparing an EIS to consider non-jurisdictional project elements in addition to jurisdictional ones. The applicant's proposed alternative includes construction of a commercial ship berth in addition to an LNG vessel berth. As part of its evaluation of the proposed alternative, FERC staff should evaluate the full range of impacts linked to this aspect of the proposed action. In the case of Jordan Cove's proposed alternative, those impacts include an analysis of the impacts linked to the construction *and operation* of a commercial ship terminal adjacent to the proposed LNG vessel berth. At present the DEIS only considers a subset of the impacts linked to the construction of the non-LNG commercial ship terminal. The DEIS does not include an analysis of the shore side requirements of the terminal, or other aspects of the operation of the proposed commercial ship terminal.

**I request that the expanded analysis of the non-LNG ship terminal include an impact analysis linked to the construction and operation of a commercial ship terminal in the proposed location.** Once the DEIS clearly defines the likely impact of the proposed non-LNG commercial ship terminal at the proposed location, **the alternatives analysis section of the DEIS document should include evaluation of one or more alternatives that do not require construction of a commercial, non-LNG ship terminal as proposed by the applicant.** This will enable readers and decision makers to evaluate how the applicant's proposal to include a commercial ship terminal as part of the LNG export terminal project contributes to or interferes with attainment of the stated need and purpose of the project under the FERC's review. It will also help to identify other suitable locations for a commercial ship terminal with potentially fewer environmental impacts. This is the objective of the NEPA process.

Example #2 Evaluation of electric power supply alternatives.

The DEIS includes a cursory, narrative style evaluation of several alternative means of supplying electric power to the proposed LNG facility. The DEIS rules out all but the proposed alternative option as infeasible. No analytical evaluation of the alternative power supply options identified is provided. The feasibility determination used by the DEIS appears to have employed an "all-or-nothing" threshold for each of the alternatives considered. If any one of the alternative power sources was singularly insufficient to supply the full amount of electric energy needed to run the LNG chillers, it was ruled out as infeasible. The DEIS does not consider options that provide a mix of power sources. **I request that the source by source power supply analysis be expanded to include an analysis of an option to furnish power needed by the facility using a combination of sources including those already identified in the DEIS.**

The analysis of the alternative to use the existing electric transmission system was ruled out because the capacity of the existing transmission lines were found to be too small to deliver the amount of power needed for the LNG facility. No further exploration of this alternative,

IND247-14  
cont.

IND247-14

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IND247-15 Alternatives to electric power are discussed in section 3.3.2.4.

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including an analysis of the work needed to upgrade the existing power distribution system so that it has the transmission capacity needed is provided. This analysis is insufficient and the insufficiency of the DEIS should be addressed in the Final EIS.

Following the narrative style analysis of alternative power supply, The DEIS concludes that construction of the South Dunes Power plant as proposed by the applicant is the only viable option available for consideration. Upon reaching this conclusion the DEIS includes little if any additional information regarding the impacts of the Power plant. Instead, the DEIS accepts the unspecified impacts of the power plant as central to the attainment of the objectives of the project.

I strongly disagree with the conclusion advanced in the DEIS that building a new generating station is the only viable alternative. The evaluation of alternative means of providing electric power to the project in the DEIS is insufficient to support the conclusion that constructing a new 420 megawatt gas fired generating station is the only viable means of providing electric power for the LNG chillers.

The limitations of the existing electric power transmission lines to serve energy intensive industries are well known in this community. The proposed LNG facility being considered by this DEIS is not the first electricity intensive industrial project proposed for the North Spit of Coos Bay. Prior to the Jordan Cove Project, NUCOR steel company considered constructing and operating a metal recycling facility on the North spit that also required a high capacity, high voltage electricity supply to run electric arc furnaces to melt scrap metal. During the development of that proposal, the project proponents evaluated the cost and feasibility of upgrading the existing electric transmission system so it had the capacity to deliver the power required to meet the needs of the proposed facility.

On the Columbia River, Oregon LNG also found the existing power transmission system insufficient to supply the power needed for their proposed LNG import-export facility. In that case, the project proponents have determined that improvements to the existing electric power distribution network could be made to meet the needs of their LNG chillers. The DEIS for the Jordan Cove does not evaluate the nature of the work required to upgrade the existing, inadequate electric power transmission network so that it can provide a sufficient level of electric energy to the project.

**I request that FERC expand the analysis included in section 3.3.2.4 to include an evaluation of the impacts associated with upgrading the existing electric power transmission system to accommodate the requirements of the proposed Jordan Cove Facility.** This will provide the Commission with a quantitative means of comparing the proposed action to other means of providing electricity for the project that the draft EIS presently lacks.

**I further request that the analysis of the applicant's proposed power plant alternative consider the full lifecycle costs and environmental impacts of constructing operating and**

IND247-15  
cont.

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**decommissioning the dedicated 420 megawatt power plant specified in the alternative  
proposed by the applicant.**

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Comments regarding the Jordan Cove DEIS document format

EIS document format guidelines for federal agencies are spelled out in 40 CFR 1502 - (Title 40 - Protection of Environment Chapter V - Council on Environmental Quality Part 1502 - Environmental Impact Statement)

40 CFR 1502.7 includes directions to agencies preparing EIS documents regarding page limits: "The text of final environmental impact statements (e.g., paragraphs (d) through (g) of § 1502.10) shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages."

The portion of the text of the Jordan Cove project draft EIS that address paragraphs (d) through (g) of Section 1502.10 is 1,308 pages; more than 4 times the recommended normal page limit for proposals of unusual complexity and over 8 times longer than recommended for normal projects. (Chapter 1 is 57 pages, Chapter 2 is 133 pages, Chapter 3 is 72 pages, and Chapter 4 is 1,046 pages). While the applicant's proposal could readily be judged to meet the criteria of "unusual scope or complexity", the current DEIS document is still so long that it is impractical if not impossible for many (most?) interested members of the public to complete a thorough review of the DEIS and to provide substantive comments on various aspects of the DEIS in the 90 day comment period provided. The length and complexity of the DEIS interferes with the stated objective of providing a concise summary of a proposed action for public review and comment.

To address this inadequacy in the DEIS, **I request that the DEIS be subjected to a rigorous editorial review aimed at substantially reducing the length of the core elements of document specified in 40 CFR 1502.7. I further request that after the DEIS should be revised as recommended, it should be prepared as a revised/supplemental DEIS which more directly addresses the directives contained in 40 CFR 1502.7.** The revised DEIS should be issued for public review and comment. An adequate time period should be provided to permit public review and comment on the revised/supplemental DEIS as per 40 CFR 1502.9.

IND247-16

A substantial portion of the DEIS narrative (e.g. chapter 5) contains FERC staff comments on how the proposed project alternative could be modified to achieve FERC authorization by diminishing the undesirable outcomes linked to implementing the proposal. The DEIS gives too little attention and insufficient space to a robust articulation and evaluation of reasonable alternatives to the action proposed by the applicant.

In addition to providing an opportunity for public input to an agency decision, a primary purpose of this EIS is to provide a decision support tool to the FERC; the ultimate decision making body charged with implementing the Natural Gas Act. Federal regulations require agencies to conduct an objective evaluation of alternatives to the proposed project. 40 CFR 1502.2 includes directions to agencies specifying that:

(f) Agencies shall not commit resources prejudicing selection of alternatives before making a final decision (§ 1506.1).

(g) Environmental impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made.

Major sections of the DEIS for this project involve a discussion of and recommendations regarding how aspects of the proposed alternative might be modified to secure FERC's authorization to proceed. This approach places the FERC staff in the role of a consultant to the project applicant. This approach and the lack of a substantive, objective, quantifiable analysis of

IND247-17

**IND247 Continued, page 9 of 16**

IND247-16 The FERC is not going to release a supplemental DEIS. The EIS is a science-driven document that analyzes the environmental effects of the proposed LNG facilities, the associated 232-mile natural gas pipeline, and the amendments to Forest Service and BLM plans that are needed to allow the pipeline to cross federal land. The EIS was written and edited by FERC staff, federal cooperating agencies, and our expert contractors. The length of the document is appropriate to address complex environmental issues. It complies with the regulations implementing the NEPA at 40 CFR 1500-1508.

IND247-17 The FERC is a regulatory agency. The EIS is an objective document, written by environmental experts. The DEIS was revised in the FEIS. Alternatives are discussed in chapter 3. The EIS is not a decision document. No decision has been made about this Project yet.

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alternatives to the proposed project suggests the FERC staff may be committing agency resources that could be characterized as prejudicing the selection of alternatives. Further, the overwhelming and specific focus of the DEIS narrative on the proposed project alternative suggests that the proposed project alternative is being treated by the FERC staff as a foregone conclusion.

To address these inadequacies of the DEIS, **I request that the narrative of the DEIS be substantially revised to address the lack of thorough quantitative consideration to and evaluation of reasonable project alternatives.** The current focus of the narrative should be shifted away from giving priority attention to the list of refinements needed to minimize the impacts of the proposed alternative to a more balanced analysis of alternatives that place the proposed alternative in a larger, objective context and provides the FERC with a suite of considered decision options from which to choose.

IND247-17  
cont.



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Additional Comments regarding the proposed large commercial vessel berth proposed by the Applicant  
While the applicant and DEIS identify a location for a berth to be used for unspecified purposes by large commercial vessels as being part of the project, the project applicant and DEIS have failed to describe or evaluate any of the land based activities or support systems required to access and support these non-LNG vessels and support the purposes of the non-LNG commercial vessel berth. The DEIS evaluation of the impacts of the commercial berth is limited to dredging the actual footprint of the berth to be used by commercial vessels. The DEIS fails to note or evaluate any possible impacts linked to the construction and operation of a commercial marine terminal proposed as part of the proposed LNG terminal complex.

The proposed design of the LNG slipway complex (including the listed boundary of the proposed project) involves construction of an earthen berm immediately west of the proposed commercial ship berth. No shore-side vessel access and support area is identified, discussed or otherwise considered in the proposal or the DEIS. **I request that the land side requirements of the proposed non-LNG commercial terminal should be articulated and evaluated in the final EIS.**

Additionally the applicant's proposal identifies a wetland protection area immediately north of the commercial vessel berth (see location E-3, DEIS figure 2.1-2) this location is sandwiched between the proposed berth and essential utilities and services including but not limited to the trans pacific Parkway and the Coos Bay Rail Link that would likely be needed to support the operation of a commercial vessel berth. The area immediately to the west of the slip and access channel is an area commonly known as Henderson Marsh. Henderson Marsh is one of the most extensive shrub scrub wetland habitats in the region. Although Henderson Marsh lies outside of the project area boundaries identified by the project applicant **FERC's EIS for the proposed LNG export facility should include a discussion of the likely impacts to Henderson marsh that would be associated with the development of a large commercial vessel berth in the location proposed as part of the LNG export terminal proposal.**

The applicant has proposed berth for large non-LNG vessels as a component of the proposed LNG terminal project. The DEIS references some possible uses for the non-LNG ship berth incorporated as an element of the proposed action. The DEIS recognizes that an actual use or user/s for the proposed non-LNG ship berth has yet to be specified. As such, **the EIS should consider the impacts of a suite of possible land, utility, safety, activities, and other requirements linked to the various types of commercial vessel operations that have been identified for the large vessel berth.**

In evaluating the element of the proposal to include a non-LNG commercial ship terminal as part of the proposed LNG export terminal, **I request that the EIS:**

- 1) evaluate how a commercial vessel berth will contribute to attaining the project's stated purpose to..."create a new West Coast LNG export point to mainly serve Asian customers, and potentially markets in Alaska and Hawaii"... articulated by the JCPCP project applicants (see DEIS page ES-2);
- 2) articulate a suite of likely uses for the proposed commercial ship terminal and provide an objective evaluation of the likely, operational (including safety), social, and environmental impacts of siting a new, large commercial vessel berth immediately adjacent to the proposed LNG tanker berth and Henderson Marsh;
- 3) consider alternative means of meeting the objectives of the proposed LNG export facility project that do not include a commercial vessel berth at the proposed location, and;
- 4) Should the aforementioned evaluation lead to a determination that creating a new a non-LNG large commercial vessel berth in Coos Bay is necessary to meet the objectives of the proposed LNG export facility, the EIS should evaluate the comparative impacts of siting a new non-LNG ship berth capable of supporting the

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IND247-18 See the response to IND245-5.

IND247-19 Henderson Marsh would not be affected by the proposed Jordan Cove Project.

IND247-20 The Jordan Cove Project no longer proposes a berth for non-LNG commercial ships.

IND247-18

IND247-19

IND247-20

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**objectives of the project in alternative locations that are not immediately adjacent to  
the proposed LNG vessel berth and Henderson Marsh.**

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Comments on Chapter 5 of the DEIS

Although the DEIS does not state it explicitly, I presume that Chapter 5 of the DEIS is the "Staff Conclusion" section referenced in the FERC regulations form implementing the National Environmental Policy Act listed below. The present form of Chapter 5 of the DEIS has two sections, Section 5.1 titled: "Summary of the staff's environmental analysis" and Section 5.2, titled: "FERC staff's recommended mitigation."

I attach the following excerpt from the Federal Energy Regulatory Commission's regulations on implementing the National Environmental Policy Act:

[Title 18 → Chapter I → Subchapter W → Part 380](#)

(See <http://www.ecfr.gov/cgi-bin/textidx?c=ecfr&amp;SID=47c103e07fd64e933c7f74cd3cdac9a&amp;rgn=div5&amp;view=text&amp;nolp=18%3A1.0.1.20.82&amp;idno=18>)

**§380.1 Purpose.**

The regulations in this part implement the Federal Energy Regulatory Commission's procedures under the National Environmental Policy Act of 1969 (NEPA). These regulations supplement the regulations of the Council on Environmental Quality, 40 CFR parts 1500 through 1508. The Commission will comply with the regulations of the Council on Environmental Quality except where those regulations are inconsistent with the statutory requirements of the Commission.  
[Order 486, 52 FR 47910, Dec. 17, 1987, as amended by Order 756, 77 FR 4895, Feb. 1, 2012]

**§380.7 Format of an environmental impact statement.**

In addition to the requirements for an environmental impact statement prescribed in 40 CFR 1502.10 of the regulations of the Council, an environmental impact statement prepared by the Commission will include a section on the literature cited in the environmental impact statement and a staff conclusion section. The staff conclusion section will include summaries of:

- (a) The significant environmental impacts of the proposed action;
- (b) Any alternative to the proposed action that would have a less severe environmental impact or impacts and the action preferred by the staff;
- (c) Any mitigation measures proposed by the applicant, as well as additional mitigation measures that might be more effective;
- (d) Any significant environmental impacts of the proposed action that cannot be mitigated; and
- (e) References to any pending, completed, or recommended studies that might provide baseline data or additional data on the proposed action.

**I request that the structure/format of chapter 5 the EIS be changed to directly address each of the 5 categories outlined in the FERC regulations regarding NEPA implementation.** The current format of chapter 5 of the DEIS mixes staff comments on mitigation measures, references to pending or completed studies, and environmental impacts in a narrative form. This is confusing and makes it difficult for a reviewer to determine if the DEIS addresses the requirements of section 380.7 outlined above.

Chapter 5 includes an extensive list of 124 additional actions to be taken and recommendations to be addressed by the applicant before FERC can determine the sufficiency, of the application. The list of actions to be completed or information to be provided prior to key steps in the development of the project is currently so extensive that it compromises the ability of an objective reviewer of the DEIS to assess the overall feasibility of the project.

**IND247 Continued, page 13 of 16**

IND247-21 Chapter 5 is the staff conclusions referenced in 18 CFR 380.7, and includes the recommended mitigation measures referenced in 380.7c. Alternatives are compared in chapter 3.

IND247-22 We disagree. The recommended conditions in chapter 5 are appropriate for a complex LNG project. Alternatives are compared in chapter 3.

IND247-21

IND247-22

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In the DEIS, the FERC staff's evaluation, conclusions, and recommended mitigation measures focus almost exclusively on the alternative proposed by the applicant. The DEIS or the recommendations it contains does not adequately evaluate alternatives to address the need other than the alternative proposed by the applicant.

In addition to evaluating the proposed action, NEPA regulations require lead federal agencies to propose and evaluate options other than the action proposed by the applicant. The focus of the analysis and recommendations contained in chapter 5 of the DEIS is almost exclusively on the actions proposed by the applicant. The DEIS does not provide a sufficient basis to compare the proposed approach to alternative approaches that might also meet the proposed need for and objectives of the project.

**I request that Chapter 5 be modified to include the 5 headings outlined in the above referenced FERC regulations. I further request that the narrative under sections explicitly address the information required in the 5 above referenced categories.** In particular the Final EIS should provide a quantitative means of comparing the proposed action to alternatives. The "alternatives" that make up the bulk of the DEIS discussion are more readily characterized as suggested modifications to the proposed action and measures designed to diminish the impacts of the proposed alternative. The DEIS and the FEIS should include a quantitative means of evaluating alternatives to the proposed project that can be readily understood by a lay audience. The DEIS lacks this essential component.

The staff report and recommendations section referenced in the FERC's aforementioned NEPA implementation regulations specify that the FERC staff report will identify any alternative to the proposed action the would have a less severe impact. Chapter 5 does not presently mention or provide a comparative analysis of the alternatives identified in Chapter 3 including but not limited to the "no-action" alternatives outlined in that chapter. **I request that Chapter 5 be revised to summarize and compare the full range of project alternatives in accordance with FERC and NEPA implementation guidelines.**

IND247-22  
cont.

IND247-23

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IND247-23 Alternatives are compared in chapter 3 of the EIS.

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Comments on the approaches considered to provide electrical power to the LNG liquefaction facility.

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Comments on Chapter 5 of the DEIS

There are numerous additional studies and reports identified in the staff recommendations section of Chapter 5. FERC staff recommendations indicate which of these reports and studies should be completed prior to the close of the comment period for the DEIS or prior to issuance of a permit to proceed from FERC. Chapter 5 of the DEIS includes 16 recommendations for the applicant to provide supplemental information prior to the completion of the comment period for the DEIS. By circulating a DEIS for public comments that lacks information FERC believes the applicant should provide prior to the end of the comment period, the FERC staff has precluded the public's ability to comment on information that FERC has deemed essential to include in the Final EIS. This is unsatisfactory because this approach rules out any opportunity for public review and comment on the additional information that will be provided following the close of the comment period.

For the above reasons, **I request that FERC develop a supplement to the EIS that includes the information specified in the staff recommendation section of this DEIS. I further request that FERC make this information available for public review and comment by issuing and circulating a Supplemental Draft EIS for public review and comment.**

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IND248

**IND248 Marilyn Bailey, Ashland, OR**

IND248-1 Water quality and the Project's effects on the bay are discussed in section 4.4.2. Safety is addressed in section 4.13.

Marilyn Bailey, Ashland, OR.  
Comments regarding the proposed Jordan Cove LNG project:

I believe that the future of a healthy ecosystem, especially waterways, in Oregon is at stake - and nothing less.  
It is hard to imagine that crossing 400 waterways in our state could possibly be achieved without failures which would wreak havoc on creeks and rivers that are already under siege. It would be a staggering defeat for a river such as the Rogue, with its important habitat finally coming back to anywhere near a healthy state, to be compromised because of a drilling or future pipeline failure. It would be a setback beyond ken and the list of past pipeline problems for this company is huge. Aside from the larger Rogue, each of the other waterways deserves - even requires - every consideration. We have done so much to harm them, which ultimately harms us, we just cannot jeopardize them.  
Coos Bay itself has borne so much pollution, and risks so much more with this proposal. Can this installation function without harming the ecosystem of the Bay? Will the discharge warm the water? Can that be reliably controlled? What about equipment failure? Transfer failures? Explosions? For everything that can go wrong, the Bay itself will pay - with that cost impacting human and economic life as well.  
How is it that we are willing to risk the health, safety, even the beauty (95' on either side of the swath - what an ugly scar on an already burdened landscape) of our State for a foreign company? Our responsibility is to our own backyard, and we have many many battles to fight to hold the line with our ecosystem now to even hold the line - not to mention bring it back to where it should be. There is NO room to risk the Jordan Cove pipeline.

IND248-1

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IND249

Kerry Holman, Port Orford, OR.  
I have worked with the USFS and BLM for nearly 30 years to establish a forest plan that addresses the needs and desires of all stakeholders regarding the management of our National Forests. With passage of the Clinton Forest Plan, we finally achieved a plan that meets sustainable forest guidelines and passes environmental reviews.  
The proposed LNG pipeline makes a mockery of all this work. The proposed pipeline through southern Oregon alone clearcuts a swath of land 100 feet wide and over 70 miles long, with much of that land being a set aside for imperiled wildlife. I don't see how this could ever pass an adequate environmental review. I would like to see a real EIS on this and alternative routes explored. Perhaps the pipeline should follow existing roads and highways, which are already disasters for wildlife. Or be scrapped altogether...

IND249-1

**IND249 Kerry Holman, Port Orford, WA**

IND249-1 This is a real EIS; with effects on wildlife discussed in section 4.6. Alternatives are addressed in chapter 3.



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IND250

Margaret Ryan, Coos Bay, OR.

There are some aspects of the Jordan Cove Draft EIS that I would like to address and ask for clarification.

1. The EIS is required to describe the need for and the public benefit of the Jordan Cove Project. The need for this project apparently centers on the desire of this Canadian company to profit from the export of North American gas, and is not based on an analysis of the public need for such a facility. There are contradictory statements in the DEIS regarding this requirement. In Ch 1.3, "Under Section 3 of the NGA, the Commission considers as part of its decision to authorize natural gas facilities, all factors bearing on the public interest". Just a few pages later, in section 1.4.4, it is stated that "With regard to the public benefit or need to export LNG from the United States to foreign nations, that decision rests with the DOE, and is therefore outside of the jurisdiction of the FERC." Such contradictions make for a confusing document. I urge FERC to adequately examine the issue of public need and benefit and include in that discussion the long term wisdom of exportation and a discussion of energy market volatility.

IND250-1

2. The EIS is supposed to present project alternatives objectively and not from a standpoint of a predetermined outcome. The purpose of offering and examining alternatives is to allow reviewers to weigh the information and to come to their own conclusion. Alternatives to the Jordan Cove project are not adequately addressed. For example, in Ch 3, p.9 of the DEIS, it states, "The proposed Oregon LNG and WEP Projects can be considered a viable alternative to the JCE & PCGP Project" Unfortunately there is no further analysis, the reason given that there is no DEIS for the alternative project. There is much information available in the Oregon LNG Bidirectional Project General Project Description of June 2013. I ask that at least one other port alternative be examined and in that examination please include a comparison of the LNG facilities, power options and pipeline requirements.

IND250-2

3. I am also concerned about factual inaccuracies in the report. For example, when discussing tsunami impacts in Ch 4, p250 states "It should be noted that although Japan has more LNG terminals than any other industrial nation, none of those facilities were significantly impacted by the 2011 Tohoku earthquake." On March 11, 2011, Industrial Info Resources reported extensive devastation of LNG facilities in Sendai Japan. This suggests that earthquake and tsunami risks to the Jordan Cove Project were not adequately or accurately addressed. I request that the accuracy and analyses be corrected.

IND250-3

4. According to NEPA page limit guidelines (see CEQ Regulations for implementing NEPA section 1502.7), the EIS "shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages". This document disregards that requirement and therefore fails to serve as an accessible public document.

IND250-4

5. Based on the large number of recommendations for information that Jordan Cove provide before the end of the comment period, (Chapter 5,

IND250-5

## IND250 Margaret Ryan, Coos Bay, OR

IND250-1 There is no contradiction. The DOE would decide on the public need to export LNG. The FERC would decide on the public benefit of constructing and operating the terminal and the associated natural gas pipeline. See response to comment IND3-4.

IND250-2 There is no pre-determined outcome. The Commission has not yet made a decision whether or not to authorize the Project. Alternatives, including alternative ports for a terminal, are discussed in chapter 3. As stated in section 3.2.2.4, the Oregon LNG Project can meet many of the objectives of the Jordan Cove Project. The section also states that the FERC has not yet produced an EIS for the Oregon LNG projects.

IND250-3 See response to comment IND245-16.

IND250-4 The EIS meets the requirements of the CEQ regulations implementing the NEPA. See response to comment IND226-7.

IND250-5 It is typical and common for some studies to be completed both after an EIS is finished, and after the Commission has issued an Order. See response to comment IND245-18.

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**IND250**      **Continued, page 2 of 2**

staff recommendations #14-26), this DEIS is incomplete and does not allow the public to review the requested information in a timely manner. I request that the recommendations be supplied and the DEIS be amended and resubmitted to the public for review.

IND250-5  
cont.

Thank you for your consideration.

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IND251

**IND251 Christine Frazer, Eugene, OR**

Christine Frazer, Eugene, OR.  
LNG Export Terminal and Pipeline Project

This project is an environmental disaster waiting to happen if it is built. Too much old growth forest will be disturbed on both public and private lands. And if this is passed with imminent domain law the owners of the private lands will be having there private citizen land owner rights violated.

Please find another way to run this pipeline or abandon it entirely. It will not produce long lasting jobs, and there are many reasons not to do it. We need ways to transport LPG but it needs to be safe. Running it through precious forest is not the answer however.

Thank you,

Christine Frazer

IND251-1

IND251-1 The EIS concludes that adverse impacts on resources can be mitigated. The Project would not be an environmental disaster. Impacts on forest are discussed in section 4.5. Private landowner rights would not be violated. See section 4.9 of the EIS, and the response to IND38-5.

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IND252

CP13-483  
CP13-492

ORIGINAL 1133 Olive St. Apt. 1213  
Eugene, OR 97401  
February 2, 2014

Kimberly Bose, Secretary  
FERC  
888 First St. NE, Rm 1A  
2015 FEB-9

Dear Secretary Rose:

I am deeply concerned about the project  
to run a pipeline for natural gas through the  
length and breadth of Oregon. Fracking itself is  
a highly polluting process. There is an almost  
100% possibility that there will be leaks.  
And wide swaths of land will be taken from  
private owners, will be cleared of trees and  
ruined. The Jordan Cove LNG Terminal will  
export this gas to other  
countries. All gas and oil must remain  
in the ground. The dangers to our planet &  
planet warming are too great for compromise.  
Please do not go forward with this project.  
It is awful.

Very sincerely,  
Peg Martin

CP13-483  
CP13-492

IND252

Peg Martin

IND252-1 See the response to IND1-2.

IND252-2 See response to IND1-1.

IND252-1

IND252-2

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IND253

**IND253 Katherine E.E. Hunt, Eugene, OR**

IND253-1 No pipeline has been started to Coos Bay. The Project is still undergoing review, and has not yet been approved. Section 4.4 of the EIS addresses impacts on waterbodies.

ORIGINAL CP13-483  
CP13-492

Katherine E.E. Hunt  
130 Hansen Lane  
Eugene OR, 97404 2015 FEB -9  
541-607-6106  
Feb 1, 2015

Dear Kimberly,

I would like to encourage  
you not to finish the pipeline  
that has been started to  
Coos Bay. The route includes  
crossing many bodies of  
water which I treasure.

I do not think this project  
is necessary. We should  
be figuring out ways to  
stop global warming not  
increase it.

Peace  
Katherine E.E. Hunt

IND253-1

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IND254

**IND254    Edgar E. Grant, Grants Pass, OR**

IND254-1    Comment noted.

Edgar E Grant, Grants Pass, OR.  
The Jordan Cove LNG Terminal and Pipeline project is a very bad idea! Our planet cannot withstand such continued assault. I pray that whoever considers this matter is on the side of the real science, which says that we're going to Hell on a high-speed train and that the use of all fossil fuels must cease if we're to survive. Please consider the future of the earth, and don't just succumb to the moneyed interests. Some of you must have grandchildren too.

IND254-1

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IND255

Maryann Rohrer, North Bend, OR.

The need for the proposed projects, terminal and pipeline, have not been established. There is no need for the residents of North Bend / Coos Bay. The only need for this proposed project is from a Canadian company that wants to export LNG to Asia. The jobs that will develop will be very few and will not be permanent jobs. NEPA requires that a need be stated. There is no need, so this proposed project is DOA.

IND255-1

Furthermore, more investigation and proof of how the Canadian company purports to contain a tsunami or earthquake so as not to cause damage to private property and the citizens of this area needs to be seriously addressed. The DEIS does not address this adequately.

IND255-2

Also, eminent domain should not apply to private properties when a foreign corporation wants to seize private properties for their own gain.

IND255-3

## IND255 Maryann Rohrer, North Bend, OR

IND255-1 The EIS does not make a finding about the need for the Project. The Commission would make such a determination in its Project Order. See response to comments IND3-2 and 3-4. During construction, the Project would result in thousands of jobs, as discussed in section 4.9.

IND255-2 See the response to IND1-4.

IND255-3 See the response to IND1-5.

20150209-0078 FERC PDF (Unofficial) 02/09/2015

CP13-483  
CP13-492

203 W. Bowden St.  
Roseburg OR 97470  
2-1-15

Kimberly Bose, Secretary  
FERC, 888 First St. NE  
Room 1A  
Washington, DC 20426

ORIGINAL

2015 FEB 9  
10:08 AM  
IND256

IND256 Elizabeth P., Roseburg, OR

IND256-1 Comment noted.

Dear Secretary,

I am writing to ~~oppose~~ - that is ~~oppose~~ <sup>oppose</sup> the LNG pipeline proposed for S.W. Oregon with a terminal in Coos Bay, OR. IND256-1

This pipeline would pose environmental hazards to our area for generations while benefiting our region of people very little. In future decades our country will need affordable gas to compete in the world economy, insisting it now for petty profits to a few is foolish & irresponsible.

Thank You  
Elizabeth Roseburg



20150209-0084 FERC PDF (Unofficial) 02/09/2015

IND257

IND257 Debra Sheetz, Ashland, OR

IND257-1 Comment noted.

2/1/15

CP13-483  
CP13-492

Kimberly Rose  
Secretary FERC  
888 First St NE, Rm 1A  
Washington DC 20426

ORIGINAL

Re: I am OPPOSED to the Jordan Cove Pipeline | IND257-1

For many reasons! It will produce only a few permanent jobs, threaten several habitats, endanger many areas for possible rupture of the line (not as safe as they claim), destroy property values, and the main benefit goes to Canada! Not the US let alone Oregon!

Do not allow Veresen to hijack us. More corporate greed.

Thank you,

Debra Sheetz

Debra Sheetz  
276 B St Apt 4  
Ashland, Oregon! 97520

2015 Feb 9  
10:53 AM  
FEB 9 2015  
FEB 9 2015

20150209-5208 FERC PDF (Unofficial) 2/9/2015 3:30:23 PM

IND258

**IND258 Vince Lang, Azalea, OR**

IND258-1 See response to IND2-8.

IND258-2 See the response to IND1-5.

Vince Lang, Azalea, OR.  
Projects; Jordan cove liquefaction & Pacific connector pipeline (CP13-493-000 & CP12-492-000)

I am expressing concern about 2 issues; Upper Cow Creek has very high concentrations of mercury in the ground & digging will expose more mercury which will enter our watershed Several neighbors get their drinking water out of Upper Cow creek & tributaries. Some do not have adequate filter systems to remove mercury. Higher concentration could be deadly. Note; High mercury warnings posted at Galesville Reservoir are on public record.

My other concern is using Eminent Domain to take peoples property for big business to make money is wrong. Especially when there is no benefit to property owners or community. This should be Illegal.  
Thank you for allowing us to comment Vince Lang

IND258-1

IND258-2

ORIGINAL

February 4, 2015

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 1<sup>st</sup> Street NE, Room 1A  
Washington, DC 20426

RE: Jordan Cove  
Docket # 13-483-000  
C.P. 3-423

I've submitted a copy of a contract between Jordan Cove and Coos County.

The contract calls for Coos County to supply Jordan Cove with 40,000,000 cubic feet per day of compressed gas via the county's 12" pipeline.

The question I would like answered is: Why isn't this section of pipeline included in the regulative and oversight process?

I've also included some photos of where the 12" pipeline ends on the North Spit. To get to the Jordan Cove Energy Facility, the pipeline must cross some wetlands and is above ground. This also leads to the question of supply.

In delivering 40,000,000 cubic feet per day to Jordan Cove, how does this effect the domestic base in Coos County? Both in supply and price?

Respectfully submitted,

  
John Clarke

John Clarke  
1102 Twin Oaks Ln.  
Winston, OR 97496  
541-679-3526

RECEIVED  
FEBRUARY 11 2015  
FEDERAL ENERGY  
REGULATORY COMMISSION

IND259

**IND259 John Clarke, Winston, OR**

IND259-1 The attached letter/contract is from 2007, when the Project was first conceived as an LNG import project. The agreement as shown in the letter called for Jordan Cove to purchase transportation services on the Coos County pipeline, which means that the Coos County pipeline would transport imported natural gas away from the LNG import terminal. Jordan Cove is no longer proposing an LNG import terminal. For the current proposed LNG export terminal, all natural gas supply to the Jordan Cove terminal would be provided by the Pacific Connector Pipeline.

IND259-2 See the response to the previous comment.

IND259-1

IND259-2

20150217-5016 FERC PDF (Unofficial) 2/13/2015 8:14:49 PM

IND260

**IND260 Gary Young, Portland, OR**

Gary Young, Portland, OR.

As Business Manager of IBEW Local 48, I am writing on behalf of our more than 4400 members in support of the Jordan Cove LNG terminal and the Pacific Connector Gas Pipeline. This facility will help revitalize the Port of Coos Bay and will bring new business opportunities to Oregon by increasing the available supply of natural gas.

IND260-1

These projects will provide thousands of construction jobs for more than four years, employing hundreds of IBEW electricians in addition to thousands of Oregonians who are laborers, welders, carpenters, teamsters, operating engineers and boilermakers. These are highly skilled craftspeople who will build a safe facility that will last for decades to come. In addition, the permanent workforce for operating the facility will be approximately 150.

IND260-2

After the Jordan Cove Terminal is complete, the Port of Coos Bay will have a great opportunity to attract importers and exporters of goods through their port creating additional job opportunities and income for the area.

IND260-3

This project will have a very positive economic impact on a region that has suffered economically for many years. Property taxes alone will exceed \$20 million each year for Coos County.

IND260-4

After more than 10 years of study and analysis, it's time to approve this project.

Sincerely,

Gary Young  
Business Manager/  
Financial Secretary

IND260-1 Comment noted.

IND260-2 Comment noted.

IND260-3 Comment noted.

IND260-4 Comment noted.

20150209-0088 FERC PDF (Unofficial) 02/09/2015

IND261

Kimberly Bose, Secretary  
FERC, 888 First St. NE, Room 1A  
Washington DC 20426

FILED  
SECRETARY OF THE  
COMMISSION  
2015 FEB -9 A 11:41  
FEDERAL ENERGY  
REGULATORY COMMISSION

Re: Docket Numbers CP13-483  
and CP13-492

Dear Ms. Bose;

ORIGINAL

I am writing with regard to the  
proposed Jordan Cove Terminal and  
Pacific Connector Pipeline Project.

\* This is a bad idea for so many  
reasons. I can't believe it is being  
seriously considered.

(1) The LNG pipeline would be in  
the Cascadia Subduction Zone area.  
Everyone knows it is only a matter  
of time before this earthquake zone  
becomes active.

(2) Fracking to produce LNG releases  
Carbon that adds to global warming.

(3) We need alternative energy forms  
not more of the CO<sub>2</sub> this plant will produce  
(over)

IND261 Roxann Prazniak, Eugene, OR

20150209-0088 FERC PDF (Unofficial) 02/09/2015

IND261 Continued, page 2 of 2

IND261-1 Comment noted.

IND261-1

I urge you to do everything possible to make sure this project does not proceed. I also urge you to support sensible, sustainable forms of energy.

Sincerely,  
Roxann Prazniak  
ROXANN PRAZNIAK  
2341 Emerald St.  
Eugene, OR 97403  
1 February 2015

20150209-0063 FERC PDF (Unofficial) 02/09/2015

ORIGINAL

CP13-492

IND262

*Original to DOE  
RD, B, XCS  
Tiller, OR, 17-18-11*

IND262

Douglas Roberts, Tiller, OR

TO Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE, Room 1A  
Washington DC 20426

Pacific Connector pipeline  
Docket NO CP-13492-000 L.P.  
FERC/EIS 02560

RECEIVED  
FEB 9 2015  
FEDERAL ENERGY  
REGULATORY COMMISSION

To the commissioners,

I am a resident of the Tiller area where this pipeline is proposed to go. This proposal does not in any way serve the public interest.

The public lands being affected are adjacent to where I live. There are many reasons that this application should be denied!

This project does not comply with the goals and objectives of the Northwest Forest Plan of survey and manage guidelines for threatened and endangered species.

this project will cause increases in runoff and sedimentation in streams and rivers. This could imperil restoration of long suffering salmon and steelhead runs.

This project does not comply with the Clean Water Act.

20150209-0063 PERC PDF (Unofficial) 02/09/2015

Douglas L. Robert  
P.O. Box 63  
Tiller OR  
97148

IND262 Continued, page 2 of 9

②  
All lands affected by pipeline have changed their longrange plans to exclude any damage caused by the pipeline construction and management to the environment. This includes loss of species, diversity, both Flora and Fauna will suffer from this project.

This project is in very steep mountains region with lots of unstable rock and soil types. These have great potential for eroding and causing land slides.

The whole area of Southern Oregon is on alert for a very big subduction zone earth quake up 9 on the richter scale. No amount of engineering can prevent calamity caused by that kind of movement. These hills are unstable enough just with weather and flooding. We should look to Japan's recent experiences with massive earth quakes.

This project does not meet safely for the people of OREGON. Williams pipeline case of the partners has had a series of accidents in Opal Wyo. an explosion at their gas processing facility caused the evacuation of the Town of Opal.



20150209-0063 FERG PDF (Unofficial) 02/09/2015

Douglas L. Rober  
P.O. Box 63  
Tiller, OR  
97148

IND262 Continued, page 3 of 9

③

There have been other accidents at Plymouth Wa, which injured five workers and caused evacuation of hundreds of nearby residents. Shrapnel from this explosion pierced the liquid natural gas tanks. The company also had several equipment failures at Hawaii Island plant.

There have been other accidents such as the explosion at San Bruno California in 2010 that killed eight people and burned thirty eight homes. About seventy significant pipeline incidents are reported each year. -W  
Should there be an incident in these rural areas our small volunteer and V.A. Forest, Service fire crews would be overwhelmed. This is a real threat to our safety!

The Cow Creek area has many active sites that leach mercury into the water shed and this shows up as mercury in the fish we eat. All the sites where heavy metals and other contaminants, are not known. By the activity from construction and maintenance well compound these problems see warnings on eating fish at Hailville Res.

④ OREGONIAN Newspaper 04/23/2014  
Sec. C pg L-1-6

20150209-0063 FERC PDF (Unofficial) 02/09/2015

Don't ask, Robert  
Per OX63  
Tiller DR,  
97484

IND262

Continued, page 4 of 9

④

This project will take through eminent  
domain private owned land at less  
than fair value to be given to a  
foreign owned corporation (Verison)  
whose profit will be taken out the country (USA).  
this is unconstitutional!

The ceding of V.A. Public lands to a  
foreign corporation through the 1920<sup>th</sup> winning  
is unfathomable. This a travesty for all  
V.A. Public owned lands a very bad  
precedent!

The loss of traditional and accustomed use  
of the forest will be impaired, uses  
such as hunting, fishing, hiking, photography,  
mushroom hunting, rock hunting, wildlife  
migration patterns and all other uses will  
not be allowed on ceded lands. In one  
fel swoop we have gone from a functioning  
ecosystem that is available to the people  
that use the forest, to a ugly scar  
that is off limits for general use!

That there will be restrictions for hunting  
and trapping activities will impair, my  
pursuits of happiness.

20150209-0063 PERC PDF (Unofficial) 02/09/2015

Daylast, Robert  
P.O. Box 63  
Tiller, OR  
97144

IND262 Continued, page 5 of 9

IND262-1

⑤  
The mitigations that are proposed are not tested. Species just don't pick up and move when disturbed, but usually just stop breeding. The LSR is a functioning forest, the problem of having private forests managed as even-aged stands causes the explosive fire event ~~that~~ make these last stands of Old-growth forests so valuable to the future of whether the spotted Owl can survive or not. Another real forest break is not what we need! The noise from construction, Timber extraction cuts, and other heavy equipment will impact their homes and what they eat. Most of this area has different kinds of trees some very hard bleeding and related activities are very disturbing to breeding pairs. This is not a fire break but fire threat! I have seen lots of land movement in the last 10 years in the same places the route follows.

IND262-2

This project will introduce new and exotic weeds into the landscape by having over 200 miles of open ground for new weed blown seeds. The noxious weed management will most probably be sprayed. This does not comply with U.S. Forest Service standards.

- IND262-1 The Project includes a wide assortment of mitigation measures. Many (such as road decommissioning and fish habitat restoration) have been used for years and are well-researched (see section 4.6). The Project includes timing restriction to avoid disturbance during nesting, see section 4.6.1.1 for disturbance and avoidance measures associated with the LNG terminal and section 4.6.1.2 for disturbance and avoidance measures associated with the pipeline. Both plants and animals live in a dynamic, ever-changing environment due to natural and human-caused disturbance and natural growth cycles. Over time species do move as suitable habitats disappear or become available.
- IND262-2 Measures to control weeds are discussed in section 4.5.1.1 for the terminal and section 4.5.1.2 for the pipeline; also see section 4.5.1.3 for measures on federal lands. The Project does not propose to use funds from timber sales to achieve the goals of the EIS. Measures to reduce impacts on the PCT are discussed in section 4.8.1.2. The Project does not include fracking; see response to IND6-1.

20150209-0063 FERC PDF (Unofficial) 02/09/2015

Doug Roberts  
P.O. Box 63  
Tiller, OR.  
97144

IND262 Continued, page 6 of 9

⑥

The project appears to use funding from  
timber sales to achieve the goals set  
out in the EIS. Dead Indian Memorial  
crossing to help with visual impact, log/3 crosses  
to help with the visual impact funding.  
all along the route are stand enhancement  
timber sales to make money for whom?  
all of a sudden our LSR forest need stand  
enhancement over 6000 acres! These gas guys  
wild and magnetic <sup>money</sup> that I love so much!

The project crosses the Pacific Crest trail  
this does not comply with a wild experience  
that this trail was created for (Wilderness act.)

The pipeline when it is operating will  
be very noisy. according to the EIS, it  
would 80 db at 100 ft, very loud indeed  
this would <sup>happen</sup> any time of day or night they  
are pumping gas, very distinctive to wild  
life.

This project crosses hundreds of streams  
at each point there will loss in  
the riparian zone. This will have serious  
effects on the threatened species that  
are are spending millions to try to save!

⑦  
The project proposes measure mitigations that are required to replace the conifer that is being removed, and covered stumps, and roads, through old growth publicly owned forests. They are some the last old growth stands in the region. No amount of designating other habitat to replace what is lost through the project. Wild animals and plants are adapted to where they live and do not pick up where humans do! In addition to the initial clear cutting of the right of way, the proposed 6563 acres of stand enhancement in adjacent forests will greatly expand the rest of wild life in the area!

This project relies on gas from Wyoming and other areas that have been developed by the use of hydraulic fracturing which causes ground water contamination and uses millions of gallons of fresh water in the process poison sludge and other waste areas are left behind. This project proposes to use 1.7 Billion gallons of water which will be discharged, contaminated with toxins from the pipe and welding residue. This does not conform to clean water act or restoration goals.

20150209-0063 PERC PDF (Unofficial) 02/09/2015

Douglas L. Roberts  
P.O. Box 63  
Tiller OR.  
971484

IND262 Continued, page 8 of 9

②

This project will end up being a terrorist target; it will be able to be seen from space. The protocols are not sufficient to protect and comply with Home Land Security for our homes, farms and ranches forests, streams, hiking trails etc. This could lead to extreme defilement danger and contribute to megafire along the route.

This project should not be authorized by FERC, because there are so many more problems that will be caused by building the pipeline.

The energy that is being shipped is not intended for domestic use, only a small lateral at Brent Pass will go to any Oregon residents. The majority of this will be shipped to Asia. Taking public resources to supply our major competitor with V.A.A. energy supply. By taking of public and private land by eminent domain should be illegal. This will also end up making our lives less safe and secure.

20150209-0063 PERC PDF (Unofficial) 02/09/2015

Douglas L. Roberts  
P.O. Box 63  
Tiller OR  
97144

IND262 Continued, page 9 of 9

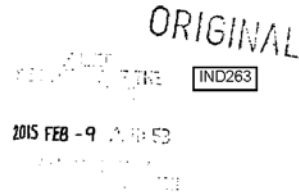
⑨

I think that if we were to develop  
energy efficient products and weatherization programs  
would be a better way to spend public  
dollars instead of using U.S. Taxpayers  
money to subsidize a foreign held  
corporations goals and objectives. This entity  
is a private corporation (Canadian) is  
important to the question of approval!

Thank you for allowing comment  
on this very bad project. Please  
reject this application.

Sincerely  
Douglas L. Roberts  
P.O. Box 63  
Tiller OR 97144

20150209-0067 FERC PDF (Unofficial) 02/09/2015



Kimberly Bose, Secretary  
FERC  
888 First St. NE, Room 1A,  
Washington DC 20426.

In reference to Docket Numbers CP13-483 and CP13-492:

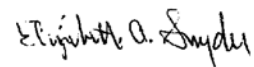
I am strongly AGAINST the Jordan Cove Pipeline.

IND263-1

I live in beautiful Southern Oregon and I want to keep our natural beauty!!!

Please don't let this terrible pipeline, piping oil (of all things!) to FOREIGN COUNTRIES be built!

Thanks,

  
Elizabeth Snyder  
1513 Lithia Way  
Talent, OR 97540

---

**IND263 Elizabeth Snyder, Talent, OR**

---

IND263-1 The Project involves the transportation of natural gas, not oil.



20150211-5230 FERC PDF (Unofficial) 2/11/2015 3:26:56 PM

IND264

Nolan D. Lloyd, North Bend, OR.

1. The Jordan Cove DEIS is far too large for the public to adequately review. It exceeds the recommended length for an EIS of unusual scope or complexity by thousands of pages.

IND264-1

2. The purpose and needs are too narrowly defined to allow for reasonable alternative development. The Jordan Cove purpose and needs are stated as: To export LNG to overseas markets. The Pacific Connector Pipeline will transport natural gas from western Canada and Rocky Mountain sources received at the Malin hub to the terminal on Coos Bay. This does not leave any room for reasonable alternatives to be developed and in fact, none were. The alternatives discussed and tossed out as not meeting the purpose and need were all of the other possible LNG export locations in the US that have been proposed or now exist.

IND264-2

3. The Jordan Cove LNG Terminal and Pipeline analysis failed to consider the true dangers of this project to increase climate change problems. This project will lead to an increase in fracking and the associated leaking of methane into the atmosphere. This is a cumulative effect and needs analysis.

IND264-3

4. The project is too close to an airport. The Jordan Cove project is less than 1 mile from the end of two runways. The plant will sit within the crash zone of one of the runways. The hill near the plant is called airplane hill for that reason.

5. The DEIS fails to adequately recognize the effects of a 9.0 or stronger earthquake on the plant or on the pipeline. The Cascadia subduction zone is within 8 miles of the proposed plant location. The pipeline and the plant will most likely be shattered by an event of the forecasted magnitude leading to environmental damage far beyond the effects of the earth moving alone. This needs to be addressed in the EIS.

IND264-4

6. The possibility of the pipeline breaking in numerous places during a large earthquake have not been adequately addressed in the DEIS. The pipeline crosses over 300 streams designated as critical habitat for anadromous fish species. When the earthquake hits, we need to know what the effects of the pipeline shattering and releasing 2000 psi natural gas into the streams.

IND264-5

7. The LNG tankers, cooling facility, power plant and holding tanks would be located in a tsunami inundation zone that also happens to be on a sand spit extremely susceptible to liquefaction and subsidence. Any accidents place a large part of North Bend at great risk and in the event of an earthquake, the citizens will have enough problems without adding the risk of explosions and fire from a poorly sited LNG facility.

8. The impact on the communities of North Bend, Coos Bay and the surrounding area by a worker housing development for more than 2000 people has not been evaluated at all. This is an increase in the population of North Bend of over 20 percent and the impact will be huge on infrastructure.

IND264-6

## IND264 Nolan D. Lloyd, North Bend, OR

IND264-1 See response to IND226-7.

IND264-2 The Project's purpose is discussed in section 1.3. We do not agree that it is too narrowly defined.

IND264-3 See the response to IND1-1.

IND264-4 See the response to IND1-4.

IND264-5 The risks to the pipeline from earthquakes are discussed in section 4.2.2.2.

IND264-6 Impacts on the communities of Coos Bay and North Bend are evaluated in section 4.9.

20150211-5230 FERC PDF (Unofficial) 2/11/2015 3:26:56 PM

9. The proposed housing development for the workers is currently located in a tsunami inundation zone and has only one road for access and egress making evacuation in the event of a disaster slow and difficult. Evacuation of the development in the event of a disaster would take far longer than the 20 to 30 minutes forecasted by USGS for a tsunami to reach the area.

IND264-7

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**IND264**      **Continued, page 2 of 2**

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IND264-7      According to the Tsunami Hydrodynamic Modeling report prepared for the Jordan Cove project the workforce housing complex would not be located within the tsunami inundation area. See Figure 8 in the Technical Memorandum Jordan Cove LNG Facility Tsunami Hydrodynamic Modeling, prepared by Coast & Harbor Engineering, filed with FERC on October 1, 2013 (Accession No. 20131001-5147).

20150210-5002 FERC PDF (Unofficial) 2/9/2015 5:44:11 PM

IND265

**IND265 Randy W. Kephart, Myrtle Creek, OR**

IND265-1 Comment noted.

IND265-2 Comment noted. See the analysis in section 3.4.2.2.

Randy W Kephart, Myrtle Creek, OR.  
I have reviewed the Draft Environmental Impact Statement and concur with FERC's findings. As with any project, the community and environment will be affected to a certain degree. The mitigation measures Jordan Cove Energy (JCE) has proposed and/or agreed to incorporate into both the short and long term construction/operation of these facilities drastically reduces these adversities. In reviewing this document it is evident that both FERC and JCE have gone above and beyond in ensuring this project will be a success to all parties involved. I ask that FERC proceed with the permitting process to grant JCE their permit for this project. I also urge you to review the alternate Blue Ridge Route for the pipeline. Although both are viable options, it appears that the Blue Ridge Route would be a more suitable region, as it affects less private parcels, and above all greater public safety both during construction and operation.

IND265-1

IND265-2

Sincerely;  
Randy W Kephart

20150209-0061 FERC PDF (Unofficial) 02/09/2015

ORIGINAL  
CP13-483 -  
CP13-492  
IND266  
2015 FEB 9  
10:17 AM  
IND266-1  
"RE: I AM OPPOSED TO THE  
JORDAN COVE PIPELINE."

IT DOES NOT TAKE A ROCKET SCIENTIST  
TO KNOW THIS PROJECT AND OTHERS SIMILAR ARE  
DANGEROUS ON SEVERAL LEVELS TO HUMANS,  
ENVIRONMENT AND FUTURE GENERATIONS! FOCUSING  
ON ONLY MONEY WILL NOT AVOID THE MANY DANGERS.  
OBVIOUSLY THE SENATORS HAVE MANY DEEP POCKETS TO  
FILL AND THEY SURELY DO NOT WORK FOR THE GREAT  
AMERICAN PUBLIC! THE FOCUS OUGHT TO BE CLEAN  
SUSTAINABLE ENERGY, SUCH AS SOLAR, WIND & WATER.  
AS I SEE IT, FUTURE GENERATIONS WILL BE IN DIRE  
STRAITS AND ALL BECAUSE OF FOSSIL FUEL CONTROLLING  
COMPANIES THAT ARE MORE POWERFUL THEN OUR OWN  
COUNTRY'S GOVERNMENT! IN CASE YOU HAVE NOT  
HEARD, IT TAKES TEAMWORK, THE WORLD OF  
COUNTRIES TO CHANGEM COOPERATION FOR THE  
DETERMENT OF OUR ENTIAE PLANET.

THANK YOU FOR HEARING ME!

JEFF KASSMAN  
276 13 STREET #6  
ASHLAND, OR  
97520-1924



IND266 Jeff Kassman, Ashland, OR

IND266-1 Comment noted. Risks to people are discussed in section 4.13.

20150209-0062 FERC PDF (Unofficial) 02/09/2015

ORIGINAL

IND267

IND267 Eugene Scott, Myrtle Creek, OR

IND267-1 Comment noted.

2015 FEB 9

Dear Kimberly Bose -

Jan 29, 2015

RE: Docket #s CP 13-483 & CP 13-492  
( Jordan Cove, Coos Bay & Pacific Conn. Pipe-  
line, Oregon )

IND267-1  
We've been following these proposed  
projects for eight years and conclude  
they are extremely destructive to the  
health and wellbeing of humans and  
life sustaining ecology.

Drilling for the gas, transporting  
it, building pipelines and export  
facilities all incur pollution of air  
and water and much natural  
destruction. To make matters worse,  
the liquefaction process alone uses  
20+% of its net energy value.

It is time to do all we can  
to slow global warming and have  
a truly sustainable national energy  
agenda: use of solar water heating,  
high quality insulation in all build-  
ings, appliances, etc. Wise use!

Thank you for your assistance,  
Eugene Scott 1909 Richardson  
Myrtle Cr, OR 97457 (541) 863 1075

20150210-5005 FERC PDF (Unofficial) 2/9/2015 7:19:32 PM

IND268

Patricia Ann Watterson, Azalea, OR.  
I oppose the proposed LNG pipeline.  
My first comment/request is to please extend the comment period. The average, above average, U.S. citizen does not have time to read a 5000 page complex statement over the winter holiday season.

IND268-1

How does this pipeline and the Jordan Cove terminal will benefit US citizens in general and Oregonians in particular. I see a lot of potential risks, dangers, environmental destruction/degradation, taxpayer's costs, noise pollution, disturbance, water pollution, degradation of our Coos Bay Harbor and fishing industry and not a lot of benefits on the other side of the equation. The degradation of a recovering environment damaged from forest logging practices we have already spent tax dollars on to rectify. A damaged fishing industry caused by the sediment and erosion of salmon spawning grounds all affected by this project. How can we justify the proposal of a foreign country to use eminent domain on our neighbors and compromise our environment.

I live in the Cow Creek Valley in Douglas County, one of the watersheds that the pipeline is proposed to run through. I irrigate my organic gardens, orchard and pastures with the Cow Creek water. Some of the neighbors pump their drinking water from Cow Creek! Just this year 2014, after living here 12 years, I begin to notice the aquatic life returning and see fish flipping on the surface. I'm required to put a 1/32 fish screen on my irrigation system to protect the fish and now LNG project wants to compromise fish habitat. And plug up my irrigation system and fish screen, which I paid dearly for. I am very concerned about the water quality changes that are likely to take place if the pipeline is built across the upper part of our entire watershed. I have explored the upper watershed of Cow Creek and have seen the erosion mining and logging practices have had on the unstable ground.

I would like to see you address landslides, sediment in streams, damage to forest landscapes, watersheds, and animal habitat. I would like to see something about potential damage and an emergency plan in an explosion, earthquake, forest fire. I would like to be able to smell a leak in the system. I would like to see an EIS of the affect of this project on all People, animals and living creatures on earth.

IND268-2

This project threatens to destroy many environmental remedies in place the taxpayers have paid for and are now just beginning to see the results of. Is money so important that you want to go in and tear it all down, threatening your own life so you can make a buck. There's something wrong with this picture.

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change.

IND268-3

## IND268 Patricia Ann Watterson, Azalea, OR

- IND268-1 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.
- IND268-2 The Project effects on these resources are discussed in the applicable sections in chapter 4 of the DEIS. For example, see section 4.2.1.3 for seismic-related hazards at the Jordan Cove site and section 4.2.2.2 for seismic and landslide hazards related to the pipeline. Effects to wildlife are addressed in section 4.6 and vegetation in section 4.5. Socioeconomic issues are discussed in section 4.9 and safety issues in section 4.13. Also see the response to IND1-2 concerning leaks.
- IND268-3 See the response to IND1-1.

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Natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG.

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment.

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then?

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land.

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND268-4

IND268-5

IND268-6

IND268-7

IND268-8

IND268-9

IND268-10

## IND268 Continued, page 2 of 2

- IND268-4 See the response to IND1-2.
- IND268-5 See the response to IND1-3.
- IND268-6 See the response to IND1-4.
- IND268-7 See the response to IND1-5.
- IND268-8 See the response to IND1-7.
- IND268-9 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7. Impacts to streams are addressed in sections 4.4.2.2 and 4.6.2.3.
- IND268-10 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

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IND269

Randy W Kephart, Myrtle Creek, OR.  
I have read the Draft EIS and agree with FERC's findings on the project. By following the Rules & Regulations put in place by Federal, State, County, and City governments to minimize impacts to wetlands; vegetation; wildlife; fisheries; environmental resources; special status species; recreation and visual resources; socioeconomic; cultural resources; air quality; noise; and safety makes this project possible with minimal environmental impacts. This is no different than hundreds of projects around the state that deal with the same impacts each day and by following the Rules & Regulation of the permits obtained along with the proper monitoring and reporting, they make minimal environmental impacts. I believe that Jordan Cove has submitted a complete and valid Draft EIS and I ask that the permitting process move forward; and the project be approved. I also recommend that you take a look at the "Blue Ridge" pipe line route which would impact less private citizens along the pipe line and could be a valid route creating greater public safety along this section of the pipe line route.

IND269-1

IND269-2

Sincerely;  
Randy Kephart

**IND269 Randy W. Kephart, Myrtle Creek, OF**

- IND269-1 Comment noted.  
IND269-2 Comment noted. See the analysis in section 3.4.2.2.



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IND270

Mickael, San Clemente, CA.  
To whom it may concern:

I am deeply concerned about the impacts of the proposed Jordan Cove liquefied natural gas (LNG) terminal and Pacific Connector gas pipeline. FERC's Draft Environmental Impact Statement for this proposal in Oregon is sorely insufficient and fails to demonstrate that there is any public need for this project.

IND270-1

The extraction, transport and eventual burning of fracked gas cannot be considered a bridge fuel. Natural gas is predominantly methane. Leakage occurs in drilling and production, transmission, processing and refining, and distribution (including liquefaction into LNG, its transport, regasification and redistribution). These fugitive methane emissions are critical factors in the life-cycle pollution of natural gas.

According to the Intergovernmental Panel on Climate Change, methane is 87 times more potent at trapping heat in the atmosphere than carbon dioxide over a 20-year period. Recent studies from Stanford to NASA point to the life-cycle of gas being as bad for the climate as coal. Shockingly, the impacts of this proposal on our climate are not addressed in your analysis.

IND270-2

Similarly, exporting gas to new markets would accelerate fracking, yet the impacts of increased fracking to feed this export project are not analyzed in your document.

IND270-3

We need good jobs, not temporary construction jobs in fossil fuel development. The U.S. should be a leader in shifting us away from fossil fuels and into a robust renewable energy culture. One million dollars of investment in oil and gas development creates 5 jobs. The same amount of investment in solar creates more than 14 jobs. This project is clearly not in the public interest and is only convenient for a foreign-owned gas company. I urge you to deny the certificate for this project.

Thank you for taking the time to consider my comments.

Sincerely,

Mickael Belot

**IND270      Mickael, San Clemente, CA**

- IND270-1      See the response to IND1-6.  
IND270-2      See the response to IND1-1.  
IND270-3      See the response to IND1-3.

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IND271

jane mara, Roseburg,, OR.  
RE: Dockets #CP13-483 and #CP13-492  
Dear FERC:  
Regarding the Jordan Cove LNG project and pipeline, and related climate science, you have already been well informed of the science by experts. Therefore,  
You already know that any hope of having a livable planet for even the next 3 generations of humans, depends on a global change from using fossil fuels to using renewable sources of energy ASAP!  
You already know that the process of fracking is a very dirty business; that it increases global warming by releasing large amounts of methane, harms the land, and disrupts whole communities where it occurs as well as those down stream who rely on the water that is contaminated in the fracking process.  
You already know that pipelines are dangerous - you know about the accidents that have occurred around the globe and you know that pipelines can leak and explode.  
You also know that this particular pipeline is more vulnerable to accident or danger from leakage than most because of the minimization of safety standards (thinner pipes and no warning odor, for instance) since it is along a rural route with a less dense population.  
I hope you know that to use eminent domain to take away the rights of American citizens for the benefit of a huge already ultra-wealthy corporation is at root un-American. And furthermore, to take away the rights of American citizens for the benefit of a foreign company could be considered, well, anti-American.  
You also know that were the Jordan Cove facility to be created, (which I trust it will NOT because common sense will, for the sake of survival, prevail) it would cause great havoc to the ecology in that area, adding to the very dangerous devastation of this planet that is occurring world-wide.  
And regarding jobs, you well know that, were the building of the pipeline and facility to occur, most jobs provided would be temporary and the number of permanent jobs minimal.  
Although I am personally involved with a property (OWL) that lies along the pipeline route near Days Creek, I would be as deeply concerned about this if I were a resident of Ashland, as I used to be, or Eugene, as I was years ago, or of Seal Rock on the coast as I lived for over fifteen years.  
This pipeline is not only dangerous for the actual areas and people along the route and in Coos Bay, it is dangerous for everyone on this planet. We cannot afford to be hoodwinked into something as dangerous as this, no matter the ostensible reasons. It is simply too destructive at a time when we need to be doing everything possible to restore health to harmed places and get CO2 out of the atmosphere and back in the ground, not the other way around.  
For the sake of your children, my children, and all children, grand-children, and - hopefully great, great, great-grandchildren, as well as all the living beings that would be harmed by the pipeline, PLEASE: PREVENT THE JORDON COVE FACILITY AND LNG PIPELINE from ever being more than a bad idea. SAY NO! You will be very glad you did.  
Sincerely,

Jane Mara  
6012 Coos Bay Wagon Rd.  
Roseburg, OR 97471

IND271-1

**IND271 Jane Mara, Roseburg, OR**

IND271-1 See responses to IND1-1, IND2-1, and IND37-3. Safety is addressed in section 4.13 of the EIS, and jobs are discussed in section 4.9.

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Marcella and Alan Laudani

IND272

February 8, 2015

Kimberly D. Bose, Secretary

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION  
OEP/DG2E/Gas 3  
FERC/ EIS-0256D

Pacific Connector Pipeline, LP  
Jordan Cove Energy Project, LP

Docket No. CP13-492-000  
Docket No. CP13-483-000

Comments of **Marcella and Alan Laudani**:

Areas of concern prominent: **Purpose and Need, Safety, Necessity and Soil Erosion/Compaction issues** of the proposed Jordan Cove Terminal and Pacific Connector Gas Pipeline projects.

The **Purpose and Need** for this project as written in the DEIS were misconstrued, misguided and completely one sided. Seemingly written by and for the applicant.

IND272-1

NEPA regulations require lead federal agencies to propose and evaluate options other than the action proposed by the applicant. The core of the analysis and recommendations contained in DEIS Chapter 5 is almost exclusively focused on the actions proposed by the applicant. This DEIS does not provide a sufficient basis for comparison of the proposed action to the alternatives that could meet objectives for the project.

IND272-2

The following excerpt recreated largely in **bold** was borrowed from the comments of Mr. James Fereday with his permission (FERC ELibrary Feb. 5, 15). We agree whole heartedly but did not have enough time to go in depth fully here ourselves. These are excellent points.

**The FERC has chosen to compare any and all alternatives to the objectives of this project, not the project itself and dismisses them because they don't fit the objectives. By doing so, the FERC has decided**

1

**IND272 Marcella and Alan Laudani,**

IND272-1 See response to IND3-4.

IND272-2 The alternatives are compared in chapter 3, not in chapter 5 in an EIS prepared by the FERC.

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which project alternative is chosen, the only project that meets its own objectives, namely, Jordan Cove and the Pacific Connector. Nearly all coverage of alternatives to Jordan Cove is thin. Again, the regulations state, (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

For instance, the Gig Harbor peak shaving facility as a possible LNG export facility is discarded because the plant is one mile away from vessel reach, but Jordan Cove is proposing a 232 mile pipeline! One could conclude that something other than the distance to a vessel is to be considered, but there is no other information to help the reader to compare realities. Another in the same dismiss-in-a-sentence mode is Newport, Oregon's peak shaving facility due to a port that would "...not accommodate LNG vessels without extensive dredging." From Google Earth, I measured 3.3 miles of dredging in Yaquina Bay compared to 7.5 for Coos Bay. The point here is, there is not an objective description of alternatives. The EIS does point out a feasible alternative in the port of Warrenton, Oregon on the Columbia River. It is one proposed export facility "...that can be considered a viable alternative to the JCE & PCGP Project." This project gets much more than a sentence or two description that the other sites received, but this one too is dropped due to the fact that an EIS hasn't yet been released. So, a viable alternative on the west coast, in Oregon, is considered not an option in this EIS. This astonishing admission gives further indication that the decision has already been made by FERC to approve the Jordan Cove project. LNG Development Company, LLC has applied to and granted approval from D.O.E. for The Oregon LNG Bidirectional Project in Warrenton. Looking over their application, there are some stunning differences, and advantages to this site over Jordan Cove. One is that there would be no need for a power plant "The proposed source of the power is the 115- 20150209-5007 FERC PDF (Unofficial) 2/7/2015 12:14:39 AMkilovolt (kV) Bonneville Power Administration (BPA) power line that runs north to south approximately ½ mile west of the Compressor Station." Another distinct advantage is the pipeline to an existing trunk line is 87 miles long compared to 232 miles for the Pacific Connector. This would be an import and export facility, owned and operated by an American company. It certainly deserves alternate consideration in the Draft EIS.

IND272-3

IND272-4

IND272-5

## IND272 Continued, page 2 of 12

- IND272-3 According to §380.7 (b),a FERC EIS should include " Any alternative to the proposed action that would have a less severe environmental impact or impacts and the action preferred by the staff;" Refer to chapter 3 for this analysis. Many of the alternatives considered in chapter 3 would not meet the purpose of the Project, others would not provide offer significant environmental benefits compared to the Proposed Action. The exception is the proposed Oregon LNG Project, as stated in chapter 3.
- IND272-4 See chapter 3 for an objective description of the alternatives.
- IND272-5 In a separate docket, the FERC intends to produce an EIS analyzing the proposed Oregon LNG Project sometime in the future, as stated in chapter 3.

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Marcella and Alan Laudani

Therefore, Chapter 5 does not mention or provide a comparative analysis of the alternatives to this proposal identified in Chapter 3, including but not limited to the 'no action' alternative outlined.

#40072-6

**Necessity of Jobs** – there are better ways to spur job growth. (Exhibits Z2, Z3)

Little doubt remains that the effects of **Climate Change will manifest in increasingly unpredictable weather patterns**. We all know about the floods, drought and mega-wildfires that appear to be escalating right here in the United States at an alarming rate. The summers of 2013-14 illustrate this point as here in the west Colorado, Oregon, Idaho, Washington and California were all devastated. (See Exhibits D5, D6) Thus the issue of Climate Change must be addressed. (See Exhibits Z, Z1)

#10272-1

The winter prior saw very little precipitation in Southern Oregon as record heat persisted from late June through mid-September. In a **Rogue Basin Climate Change Impact Report** which was dated June of 2008 (see Exhibit A), increases in and extended summer temperatures as well as dramatic decreases in snow accumulations with earlier snowmelt and higher spring runoff events are already occurring. This translates to major erosion issues particularly on steep slopes and where the proposed 234 mile Pacific Connector Gas Pipeline would predominately cross Southern Oregon. Higher overall temperatures are expected for the Upper Rogue at Lost Creek near Shady Cove and Trail, Oregon according to NOAA. The month of August and some of September 2014 saw temps mostly in the mid 90's. Several thousand numerous lightning strikes, at final count 14,000 strikes, were recorded in a twenty four hour period summer 2013. (Exhibit B). Final costs of these fires place a tremendous burden on the State of Oregon as fires in remote areas, such as the BLM, are not covered by FEMA. (See Exhibit C).

**Fire Prevention and Fire Safety** is a topic near and dear to me. During the years 2002 – 2004, I worked for the County of San Diego Parks and Recreation Department as a rangers aide and a flagger on the Pines Fire for Heise campground park near Julian, CA. Working on the Cedar Fire which broke out near my then home in Ramona, CA, while at Lake Jennings, I witnessed this fire which ultimately took 15 lives and many friends homes in

3

## IND272 Continued, page 3 of 12

- IND272-6 Alternatives are compared in chapter 3, not chapter 5 in a FERC EIS.
- IND272-7 See responses to IND1-1 and IND2-3.

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the over 230,000 acre record making, mega wildfire caused by a hunter's flare. As stated previously, we live in an extreme fire hazard zone.

The summer of 2014 brought major complex fires to Southern Oregon. These were started by increasingly severe, numerous lightning strikes. Shown in (Exhibits D, D1, D2, D3, D4). The Rogue River Fire (See Exhibit D1) came within six miles of our home and blew up with a single extended wind gust.

One can see the immense challenge faced by emergency first responders and resource personnel under what is considered naturally occurring events such as lightening.

A considerable amount of the forested terrain near residences and on the proposed PCGP route is listed as difficult and often inaccessible in terms of fire emergency indicated on [www.InciWeb.org](http://www.InciWeb.org). In their reports such as the 790 Fire located in the Sky Lakes Wilderness area (Exhibit D3), it is clearly demonstrated the immense difficulty of accessing and responding to steep, challenging terrain. Burying a 36 inch natural gas pipeline under extreme high pressure a mere two to three feet underground in very steep densely forested terrain and sensitive areas, as well as too close to residential populations, businesses, farms and livestock must be avoided.

Progress on the 790 Fire was slow due to steep and difficult terrain, very high temperatures in bone dry conditions, afternoon gusty winds, cover consisting of a mixed forest of conifers, oaks and madrone with dense underbrush and dry grasses. **Very steep terrain is a major factor concerning access and is typical of this area. Fire laddering and steep up drafts make for erratic fire behavior** but is considered normal in mountainous back country.

**By deliberately allowing for a high pressure gas pipelines thickness to be anything less than top grade or Class 3 be it metro or rural residence is discriminatory.** This is to say that persons legally living in a less populated area **do not qualify for the same safety standards handed without question to their more urban neighbor.** It clearly says rural citizens are not equal – are not in the same class – as some. This is unjust. Refer Table 4.13.9.1-1, Pg. 4-987 DEIS.

IND272

IND272 Continued, page 4 of 12

IND272-8 See the response to IND1-7.

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**Legislation should be mandated and implemented** for all new natural gas, oil and hazardous chemical pipelines to follow existing roadways and on flat terrain as multiple new proposed projects vie for market share.

**As an affected owner near milepost 123 of the proposed Pacific Connector Pipeline, the new alignment sheets for our property indicate an additional temporary extra work area (TEWA 123.08w)** that would sit atop our septic systems' drain fields. In fact, the entire area that Pacific Connector has laid out as the 65 foot easement ROW on our property including this additional work area that would add another 30-35 feet holds our drain fields for this septic system. Automatic pumping systems moves biologically broken down waste through the sand filter and down this slope to three separate drain fields which are connected by effluent sewer piping. Heavy equipment and the compacted soils resulting from work on this additional TEWA and ROW is too close to our homes operating systems. **Appendix C – pg. 1482 shows an illegible map with the letters A-B2 in vicinity of milepost 123.** The entire area surrounding my home looks to be completely deforested and rendered worthless. Please take steps to correct this apparent devastation. This family left Southern California to get away from the Heat Island and Dust Bowl effect. Wild Turkey are known to roost in trees at this fork of Old Ferry RD. Also to be noted is the active pair of Bald Eagles who appear every spring to nest in the ponderosa pines at MP 123.1 approximate, along this proposed ROW.

Our passive solar home and 3 acre parcel property sits east of the Upper Rogue River near Trail, OR and is bisected by the Old Ferry RD. The home is designed to sit into a 25 degree angled slope with a retaining wall on the north and eastern portions of the foundation. This slope then continues to rise gradually 30 feet to the east, and then sharply, at a 45 degree angle east and above our home. The soils in the immediate vicinity surrounding the home are Medco Cobbly clay and McNall clay loam which are cement like in summer and pudding like in winter. High compaction of these soils, erosion of disturbed vast forested areas, mudslides and local landslides such as a 40 X 40 ft. slide on Old Ferry RD above the Barber property (see **Exhibit G**), vital topsoil's displacement and sedimentary runoff are just a few of the problems faced by a construction process of the proposed Pacific Connector Pipeline.

Three summers ago we found it necessary to have a 200 foot long by 12 foot wide curtain drain excavation project dug on the east and uphill side of our

IND272-6

IND272-10

## IND272 Continued, page 5 of 12

- IND272-9 As explained in section 4.9.2.3 of the DEIS, the construction right-of-way would be restored after pipeline installation, and landowners would be compensated for any damages. We suggest you address protection of your septic system during negotiations with Pacific Connector.
- IND272-10 Bald eagles are protected by law. Section 4.6 addresses impacts on wildlife and birds. Pacific Connector filed a draft Migratory Bird Conservation Plan.

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home. The excavator found it necessary to break up long columns of granite rock as this was funneling groundwater directly to our basement. The previous winter's rain brought over an inch of water into my husband's workshop and my laundry room. Also, there were significant pudding-like mud slides across the new driveway pad. With a 95 ft. easement crossing north to east just uphill and directly behind our home the removal of the vary erosion control methods such as numerous large trees, shrubs and grasslands will pose additional substantial safety issues to this home

After a Pacific Connector open house in Medford I had asked Geo Engineers what their strategy was. I was informed that sandbags, a special foam and erosion control matting will be placed along the easement in areas of potential landslides. This does NOT answer the question. Quite simply this is no substitute for the naturally occurring water absorbent extensive root systems of the many forest trees and chaparral currently in place. **Long term existing erosion control must be retained on this 45 degree angled slope immediately to the north and east of our home.**

Another newer concern, whereby our south facing deck had sunk two plus inches on the west end after the initial rains a couple years past, is the most recent development to our relatively new home related to clay soils.

During the winter of 2005-2006, prior to build completion of our home, we had our electrical cable placed under ground. The area received over 23 inches of rainfall between November 15 and February 28, 2006. This cable is contained in PVC pipe which connects from our transformer located on the Old Ferry RD west of our home, runs down a short steep slope and continues on to connect with the John Roberts' property transformer, or a length of enclosed electrical code guidelines wiring of about 726 feet. A mudslide that had to be shored up by digging out and containing with hay bales was resultant.

According to Rex Owings, former routing coordinator for Pacific Connector Pipeline Project, this PVC cabling will need to be dug up so that the road where it crosses can be used as an access road for the rigs of the project. He suggested "you would be given use of a generator" for all our power needs. **We are dependant on our water well with a specialized high capacity pump that can be utilized in combination with our fire protection sprinkler system in the event of a fire.** Use of this 'generator' and subsequent destruction of our electrical cable installation is unacceptable.

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Installation of this cable came at a significant expense as my family thought it best to use the best available practices available with regard to fire protection. **We must be assured continuation of our utilities during the project without interruption or degradation of service.**

**The soil profile does not support major erosion** or deforestation to the mountains ridges facing properties on its slopes. During the winter years November 2007 and March 2008, we received a total of 35 inches of rainfall (we no longer have a home weather monitoring station). Over .5 inches was received in a 1 hour period with as much precipitation received (.5 inches per event) in multiple 24 hour periods. Rainwater typically sheets off the top layers of soil when accumulations of .5 and higher occur within short periods of time. This is a common occurrence here. The A Horizon soils then quickly become pudding like and slough off and run down the mountainside with extended periods of rain.

What protects our home and property from major erosion is the forested area of numerous mature trees and chaparral approximately 30 feet to the north, east and south. The clay expansion soils quickly reach their full saturation point and these forests provide anchorage and stability to the slopes above the many homes of our unique area.

**On page 3-50 DEIS within Table 3.4.2.9-1 Soils.** This states on the last footnote l/ Seven TEWAS associated with the Old Ferry RD improvements are located on Soil Mapping UT's. 144G or 122E, which have a Reclamation Sensitivity rating. By very definition more level areas designated for TEWAS along the Old Ferry RD are rated as such. Footnote k/ Reclamation Sensitivity – soils having reclamation sensitivity is a combined rating for soils with **high or severe erosion potential, steep slopes, large stones, shallow soils, and saline or sodic conditions and clay soils. This also includes soil map units with dominant amounts of rock outcrop.** See page 4 – paragraphs 1 and 2 reference comments above. Also see Table 4.3.2-3 Summary Soils Limitations/ Shady Cove.

We are dependant upon a well for all our water needs. Our maintenance room houses the well pump, interior sprinkler systems' control panel, high pressure water pump and 300 gallon tank, hydronic water heating systems' boiler and piping system which heats water then pushes condensed steam up to heat the home and the duo water filtration/softener systems.

Originally, and **in terms of Health and Safety**, our well water was extremely high in Calcium, moderate Sodium, but also **was listed .010 of**

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**Arsenic, or higher than the newer EPA limit of 0.0005.** The reverse osmosis filtration system, coupled with the softener/filtration system, has brought these levels down considerably so as to not prove a health hazard, fire hazard nor cake these sensitive water systems with calcium deposits, dense concentrations of clay residues, silts or other harmful residues.

**The effects of blasting,** according to **Table 4.2.25-1 pg. 4-284** of the DEIS MP 112-135 is Mod. – High Blast Potential identified by Pacific Connector. Why are these areas not identified and quantified by local federal agencies? **Pg. 4-286 Under Water Wells and Springs** is stated; should it be determined after construction that there has been an impact on groundwater supply (either yield or quantity), Pacific Connector would work with the landowner to ensure a temporary supply of water, and if determined necessary, Pacific Connector would replace a permanent water supply. How, and from where exactly? Further is stated; Yields from perennial streams could decrease if blasting vibrations damaged the related aquifer. Yet Pacific Connector would only request authorization to test and document the baseline condition, yield, and water quality of private wells within 200 ft. of the pipeline construction ROW. **Damage to our water supply would more likely occur to an aquifer upland from our home and outside this tiny window.** The easement of the proposed pipeline, upslope and to the north and east of our home and well water supply is less than 500 feet. Again, this project did not describe impacts to an aquifer located in steep terrain. Not mentioned are the effects of Arsenic and other health hazards being leached from newly blasted volcanic rock and siphoned into our water supply, quite likely at dangerous concentrations. **Water pressure for the Fire Protection System needs to be maintained at above 27 gallons per minute to operate properly in conjunction with its specialized pump.** Our water pressure currently is at 29 gallons per minute. Blasting and earth moving places our aquifer and underground stream at serious risk. Also, this blasting and subsequent compaction of soils will possibly disrupt or destroy the duo water filtration system's ability to filtrate by breaking down the A and B Horizons in the top layers of soil. Likely too, boulders and bedrock that are cracked and shifted will damage or destroy this aquifer that supports our only water supply and filtration systems. The value of such aquifers cannot be mitigated. Fracturing this most intricate and vital life support system **can** and **must** be avoided.

**Page 4-286** has a statement: Nearly all households in the Shady Cove area (btn. MPs 122-123) obtain water from wells already impacted by the

IND272-11

IND272-12

IND272-13

IND272-14

## IND272 Continued, page 8 of 12

- IND272-11 The applicant is responsible for identifying where blasting would be required to construct the pipeline. The information in the DEIS provided by the applicant will be reviewed by all the agencies that have authority over blasting operation.
- IND272-12 It is not likely that excavation of a shallow trench would have negative impacts on a deep aquifer. However, in its Groundwater Supply Monitoring and Mitigation Plan, Pacific Connector states that should it be determined after construction that there has been an effect to groundwater supply (either yield or quality), Pacific Connector would provide a temporary supply of water, and if determined necessary, would replace the affected supply with a permanent water supply. Mitigation measures would be coordinated with the individual landowner to meet the landowner's specific needs. In addition, during easement negotiations the landowner can work with Pacific Connector on siting the line within individual properties to increase the distance between the pipeline and any springs or wells.
- IND272-13 See response above.
- IND272-14 The text has been revised.

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relatively high density of nearby development. First please detail what development and just how is this relevant?

Mitigation measures for groundwater wells, springs and seeps would be specific to each property and would be determined during landowner negotiations, **also page 4-286**, is a weak statement at best. Landowners require guarantees to the health of their water source and water quality.

**A pipeline breach and subsequent explosion is anything but normal.** The resultant fire cannot be put out through normal means and because of the enormous blow torching effect could touch off a huge mega fire instantly. (See Exhibit I) point emphasis.

**Safety Record of Pacific Connector Gas Pipeline and Williams Company with at least five major incidents in 2013** (see Exhibits J, J1, J2, K, K1), the newer explosions for 2014 started with a faulty valve burning in Oregon (Exhibit T). (Exhibit P gives a short summary of what followed); the Washington LNG Facility Explosion which seriously burned one worker, injured four others and forced the evacuation of 400 residents (W, W1), at the Opal Hub in Wyoming (Exhibits X, X1, X2) which included the evacuation of an entire town. Finishing out that year (Exhibit Y) demonstrates the extreme fear and the pushing people out of their homes on Christmas Eve. Given the **extreme** high pressure and diameter of the proposed Pacific Connector Pipeline, **locating anywhere other than along highways, flat and easily accessible terrain is reckless and endangering to the health and livelihoods of countless citizens. Rapid response time equals saved lives and property.**

**Regarding public safety**, an important point is the town of Trail and the proximity of the Trail Market's gasoline service site to the proposed Pacific Connector Pipeline. **Another pipeline owned and operated by the Williams Gas Company ruptured.** (See Exhibits M, N). This pipeline, line B, had been inspected only a month prior by a new pipeline inspection gauge or FIG. The operating pressure of that pipeline was less than half of what this proposed pipeline will be, if at 1440 pounds per square inch.

Lightning was responsible for another **Williams Co. Compressor** incident (see Exhibit L).

**On July 1, 13 Williams Transco was fined almost \$1 Million** for the Appomattox, VA pipeline explosion following the investigation that found numerous safety regulation violations. Failures to address regulatory

IND272 Continued, page 9 of 12

IND272-15 See response to IND272-12.

IND272-14  
continued

IND272-15

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Dockets CP13-492-000/CP13-483-000  
Marcella and Alan Laudani

requirements for monitoring and preventing external corrosion were cited by U.S. Dept. Transportation of Pipelines and Hazardous Safety. (See [Exhibit N1](#)).

The proposed pipelines location and horizontal directional drilling process (HDD) is slated to run within approximately 800 feet of Trail Market Gasoline Service Site ([Exhibit H](#)). I learned the actual distance using ROLATAPE Model 200 Santa Monica, CA. Wanting to clearly read the street sign behind the third gas pump, I drove down to investigate (is Old HY 62), then was appalled to also find not only the Trail Post Office but Trail Museum and at least 140 dwellings. Here too is Old Trail Creek RD with the Trail Community Church, Cemetery, Jackson CNTY Gravel and an additional 550 residences just on this road, all within a half mile of the proposed HDD. The alignment sheets for the project at Rogue River Crossing show none of this. HDD for Pacific Connector 36 inch pipe has a failure rate of one out of three. The proposed crossing site presents multiple compound safety issues as I've stated before in an addendum to my prior Import Motion to Intervene dated April 25, 2008. The Rogue River lies roughly 100 feet from this gasoline service site and its underground storage tanks. In the event of rupture/explosion from the extremely high pressure Pacific Connector Pipeline, the City of Shady Cove, (located 1.2 miles SW of proposed HDD crossing), and Trail would be vastly imperiled. Next to this hazard zone and south is the Shady Trails RV/Motor Home Park located next to HY 62 closest to Rogue River (see [Exhibits O, O1](#)), with 200-250 residents year round; add to this the extended families, visitors and friends from April – November. How can you "compensate" cities such as Shady Cove and towns like Trail, whose lifeblood depends on her tourism industry, sport fishing and boating for the disruption and destruction along the only highway (Highway 62) connecting these much sought after scenic areas such as Crater Lake National Park?

**Regarding the history of Earthquakes and Oregon** It appears we are making history. Between 2014 and the present, Southern Oregon to Northern California, both along the coast and inland have experienced seismic events of note. Of particular interest is a swarm of over 700 earthquakes increasing in intensity near Lakeview, Oregon. Happening within 45 miles of the **Ruby Pipeline** – with some quakes occurring as shown on the map – much closer. Scientists state this is caused by stretching of the earth's crust. The **Ruby Pipeline** would connect to **Pacific Connector Pipeline**. (See [Exhibits E, E1, E2, E3, E4 and E5](#) for detail).

IND272-16

## IND272 Continued, page 10 of 12

IND272-16 The alignment sheets, which are not included with the DEIS, are aerial photo-based and are at a scale that shows individual structures; therefore structures near the HDD site appear on the alignment sheets. As stated in section 4.12.2.4, the closest residence to the eastern end of the Rogue River HDD section is 340 ft. the closest residence to the western end of the Rogue River HDD section is 740 ft. Measure to reduce noise from the drilling are discussed in that section.

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Early December of 2012 brought a deluge of rains to the Upper Rogue and Old Ferry RD. In a single 24 hour period the Rogue River flooded bringing over 2 feet of water across this road at Flood Rock (see [Exhibit F](#)). The BLM just completed major repairs to this section of road that the very heavy and repeated use of construction equipment loaded on a regular basis to provide the Pacific Connector Project with rock, 60 foot pipe segments, etc., would likely destroy or greatly impact.

Old Ferry RD bisects a moderately steep slope next to a large seasonal spring (see [Exhibit F1](#)). This seasonal spring brings with it considerable runoff each year down the slope, under the Old Ferry Road by way of a conduit maintained jointly by the BLM and Old Ferry RD Committee, and proceeds down this steep slope to the Rogue River.

The Old Ferry Road Committee purchased and installed a residential access gate to stop potential problems associated with remote rural living. This has enjoyed much success.

Problems related with open access of the Old Ferry Road include; providing an easy venue to wildlife poachers, illegal campfires used by poachers and vagrants, an open avenue for marijuana farming, drug trafficking and back country meth labs, illegal trash dumping and vandalism.

The Upper Rogue attracts tourists and tourism adds much to the growing local economy. However, seasonal visitors have been known to venture on to private roads and unless the BLM can provide a comprehensive plan to: a) install and man an access gate, b) patrol the road daily on a regular basis, and c) communicate problems or concerns to the residents along the Old Ferry Road, we don't see use of this road as feasible.

IND272-18

Henderson's Stars, *Triteleia hendersonii*, a wildflower which is considered rare and found in the Siskiyou's (source: page 190 -Wildflowers of the Pacific Northwest by Turner, Gustafson) is also found on our property along the Old Ferry RD and proposed easement. I have seen this flower early summers past, as well as *Triteleia crocea*, also rare but found just in Jackson County. Both are native.

Finally, let it be known that 90 days to comment during the busiest holiday season of the year, coupled with the added burden of scrambling to submit documentation i.e., HealthCare.Gov and related Oregon insurance

IND272-19

## IND272 Continued, page 11 of 12

IND272-17 Comment noted.

IND272-18 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

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Marcella and Alan Laudani

companies (also w/ a deadline), THEN getting very late updates concerning Jordan Cove soil contamination issues (February 3, 2015 FERC E-Library) is not granting nearly enough time to respond thoroughly.

**The portions of this DEIS that I did read were largely outdated in sum and substance as far as reference materials used, i.e., Climate Change, Earthquakes.**

In view of the latest findings concerning Jordan Cove, the current Draft DEIS must be revisited or vacated.

Respectfully submitted,

Marcella and Alan Laudani  
Shady Cove, OR 97539  
[hikelandy@yahoo.com](mailto:hikelandy@yahoo.com)

**IND272 Continued, page 12 of 12**

IND272-19 We disagree. The potential impacts from seismic activity is addressed in section 4.2. See response to IND1-1.

20150210-5201 FERC PDF (Unofficial) 2/10/2015 3:51:51 PM

IND273

Diane M Crawford, Coos Bay, OR.  
I have reviewed the Draft Environmental Statement and agree with the  
FERC'S findings. With any project the community and environments will be  
affected. In reviewing the the document it is evident that both FERC and  
JCR have gone above and beyond what is required to enssure the project  
will be asuccess for everyone involved. I would suggest that FERC proceed  
with the permitting process to grant JCE their permit for this project. I  
would also urge you to review the alternate BLUR RIDGE ROUTE for the  
pipeline. It just makes good sense that the BLUE RIDGE ROUTE would be the  
more suitable region, as it affects less private parcels, and above all  
greater public safety both during construction and operation.

IND273-1

IND273-2

**IND273 Diane M. Crawford, Coos Bay, OR**

- IND273-1 Comment noted.
- IND273-2 Comment noted. See the analysis in section 3.4.2.2.

20150209-0016 FERC PDF (Unofficial) 02/09/2015

ORIGINAL  
IND274

2650 Costa de Ruta  
Eugene, Oregon, 97403  
Feb 1, 2015

Kimberly Boze,  
Secretary, FERC

Re: Docket CP13-483  
CP13-492

Jordan Cove LNG Terminal

I am concerned about the plan of an LNG plan at Jordan Cove.  
Construction there will severely disrupt the local bay ecosystem, which  
is the economic backbone for the local marine economy. It  
would be a shame to cause a dual displacement - ecological  
and people jobs.

That the site is subject to tsunamical earthquakes  
damage adds greater concern to the plan itself here.

IND274-1 | Please carefully review the proposal and reject it.

Thank you,

John V. Allicott MD

John V. Allicott MD  
2650 Costa de Ruta, Eugene, OR 97403

**IND274 John V. Allicott, Eugene, OR**

IND274-1 Comment noted. Earthquakes and tsunamis are addressed in section 4.2 of the EIS.



20150209-0017 FERC PDF (Unofficial) 02/09/2015

IND275

ORIGINAL

Kimberly Buse, Secretary  
FERC  
888 First St. NE Room 1A  
Washington, DC 20426

2015 FEB-9  
10:09 AM

Re: Docket Numbers CP13,483 & CP13-492

To: FERC

I am concerned about the proposal on the Jordan Cove Terminal. I am very interested in preserving and protecting the natural and ecological values of the water and trees that would be jeopardized and destroyed to support this proposal. I am not in support and actually strongly ~~opposed~~ <sup>opposed</sup> to this project.

IND275-1

Additionally, the deleterious effect of the increased carbon production caused by fracking and the CO<sub>2</sub> greenhouse gasses caused by the LNG terminal is completely unacceptable. We are the guardians of ~~our~~ <sup>our</sup> children's future and the natural and ecological values are not ours to destroy but rather to protect.

Sincerely,  
Joanna Castro  
Joanna Castro  
30000 Wilke Rd.  
Creswell OR 97426

**IND275 Joanna Castro, Creswell, OR**

IND275-1 Comment noted. The EIS concludes that adverse impacts on resources could be mitigated; therefore the Project should not destroy natural and ecological values. Impacts on water are discussed in section 4.4. Impacts on vegetation in section 4.5. See response to IND1-1 and IND6-1.

20150210-5216 FERC PDF (Unofficial) 2/10/2015 4:30:56 PM

IND276

Maya Watts, North Bend, OR.  
Docket #s CP13-483 and CP13-492

Comment 1: In this EIS statement I expected to see Jordan Cove presented as one possibility among 14 considered and assessed as a possible site. The executive summary (pg. DEIS-1) says "The purpose of this document is to inform the Commission...and the public about the potential adverse and beneficial environmental impacts of the Project and its alternatives." Where is the equal assessment of the other potential sites? It is my understanding that the standard format of an DEIS includes alternative ways to meet the need, including the proposed action (i.e. Jordan Cove project). This is certainly written as though Jordan Cove is the only option and a decided upon option. In section 3.2.4, the DEIS states that "FERC has not completed its environmental review of the combined Oregon LNG and WEP Projects; and we have not yet issued a draft EIS for the projects. It would be premature, prior to the issuance of the draft EIS, to assume that the combined Oregon LNG and WEP Projects would have either significant environmental impacts or advantages over the proposed JCE & PCGP Project" (DEIS p. 3-9, 3-10). How can you truly analyze and compare alternative sites even for the pigeon-holed primary objectives described if one of the sites has not been assessed and an DEIS produced? I want to see a comparison of the DEISes for the proposed LNG export terminal for Warrenton, OR and the Jordan Cove project at the very least.

Comment 2: DEIS statements are supposed to be written such a way that the public can understand them. And they should be of 150-300 pages (300 if the project is huge) (40 CFR 1502.7). This document is over 1000 pages including extensive appendices. I stopped counting pages and could never read the entire document in the given time as a member of the public with a job. This seems like a blatant effort to insure the fewest number of citizens will even attempt to read the document given its intimidating size and extensive use of jargon. As an objective regulatory agency why has FERC not required those producing the Jordan Cove DEIS to adhere to basic guidelines set up by NEPA regulations? You need to have a more extensive table of contents for each section that allows the public to be able to click on an appropriately labeled section of interest to skip to. As is this DEIS appears designed to discourage the public from reading and commenting.

Comment 3: Oregon resides right over the subduction zone where the Juan de Fuca plate (and others) slides under the North American plate (very similar to the subduction zone that caused the 2004 Indian ocean earthquake and tsunami (waves heights from 80-100ft.). The DEIS mentions this in section 4.2.1.1). We are 300+ years past the due date at which geologists tell us we should have had a large magnitude (megathrust subduction) earthquake similar to the Indian Ocean event in 2004. All geologists agree this is not an "if situation" but a "when situation." Having two 180 foot storage tanks containing 160,000 m3 of LNG (DEIS 2.1.1.5) on a sand spit that would be the first land mass hit by a theoretically predicted megathrust subduction induced tsunami sounds like an apocalyptic movie nightmare. (For clarity a spit in geologic terms, "is a narrow coastal land formation that is tied to the coast at one end"

IND276-1

IND276-2

## IND276 Maya Watts, North Bend, OR

IND276-1 Jordan Cove's analysis of various ports that it examined along the Pacific Coast of the United States can be found in section 10.3.4 of Resource Report 10, included with its May 21, 2013 application to the FERC. Jordan Cove's application in Docket No. CP13-483-000 is a public document that can be viewed in electronic format on the internet through the eLibrary system of the FERC's webpage ([www.ferc.gov](http://www.ferc.gov)). As stated in section 3.3.1 of the DEIS, our detailed analysis of potential West Coast alternative ports was included in section 3.3 of our May 2009 FEIS for the original Jordan Cove LNG import proposal in Docket CP07-444-000. This document is also available for public viewing through the FERC webpage.

IND276-2 The EIS analyzes very complex issues. These include the LNG terminal, the 232-mile pipeline, and federal land management plan amendments.

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(Encyclopedia Britannica). I realize that Jordan Cove proposed to enclose the tanks in an "earthen berm or storm surge barrier that that would be about +60ft. high, designed to contain the content of one 160,000 m<sup>3</sup>." And the "base elevation of the storage tanks would be 30+ feet about sea level." (DEIS 2.1.1.5). The whole section on seismic-related hazards (DEIS 4.2.1.3) recognizes this explicit public concern and previous commenters. For Jordan Cove a "tsunami modeling study was performed (CHE 2013a) for the same seismic source event as was used to determine the Safe Shutdown Earthquake hazard (which has a 2,475-year return period)." What does a 2,475-year return period mean exactly? I am not a geologist or physicist but I want to see the CHE 2013a tsunami modeling study of what will happen in the case of both a modest and a megathrust (worse case scenario) earthquake at the Juan de Fuca/North American Plate boundary and the potential range of heights and degrees of force of resulting tsunamis. Wikipedia (admittedly not always accurate) cites sources that estimate that the total energy of the tsunami waves from the Indian Ocean tsunami was equivalent to about five megatons of TNT (20 petajoules) which is more than two atomic bombs<sup>1</sup>. There should be a simulated assessment and analyses of how the proposed Jordan Cove facility (storage tanks and proposed surge barrier would hold up to such wave heights (conceivably 80-100 feet) and energy. AND, this should be done for each proposed site, not just Jordan Cove's DEIS but a comparison of many including other Oregon sites (i.e. Warrenton, OR and the site on the Columbia River). And the statement "We conclude that the site-specific tsunami studies, coupled with Jordan Cove's proposed mitigation measures, indicate that the site is not unsuitable due to tsunami hazards," is not comforting. If by mitigations you mean building structures higher on "consolidated sand" and the earthen berms/surge barriers that can hold the exact volume of the holding capacity of your storage tanks but presumably not a massive amount of excess tsunami-delivered water, then I am really concerned.

1. "Tsunamis and Earthquakes: Tsunami Generation from the 2004 Sumatra Earthquake - USGS Western Coastal and Marine Geology".  
Walrus.wr.usgs.gov. 12 August 2010.

IND276-3

**IND276 Continued, page 2 of 2**

IND276-3 The CHE study is available on the FERC's eLibrary, filed under CP13-480-000. In particular, see the response to FERC's data request for additional information files on November 27, 2013. A return period, also known as a recurrence interval (sometimes repeat interval) is an estimate of the likelihood of an event, such as an earthquake, flood or a river discharge flow to occur. It is a statistical measurement typically based on historic data denoting the average recurrence interval over an extended period of time, and is usually used for risk analysis (e.g., to design structures to withstand an event with a certain return period).

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IND277

Sharon Rickman, VANCOUVER, WA.  
Federal Energy Regulatory Commission (FERC):  
I am very concerned about the impacts of the proposed Jordan Cove LNG  
export terminal and Pacific Connector gas pipeline. I am particularly  
disappointed in FERC's Draft EIS as it is entirely insufficient and fails to  
demonstrate the public benefit from this project, or the best energy  
project for Oregon or anywhere else in America.

IND277-1

Direct impacts to public lands and waters from such this significant  
construction project would directly harm breeding sites of threatened  
species, including fish and birds. Already polluted streams cannot  
sustain additional pollution from by adding warmed waters and sediment.

IND277-2

LNG undercuts the State of Oregon's work to combat climate change. The  
lifecycle carbon impacts of LNG are just as bad as coal. Increased  
drilling for natural gas, fracking, and liquefying and shipping LNG  
undercuts the State's climate change agenda.

IND277-3

The stated need for this project from the proponents is to continue  
fracking and to expand fracking. Yet FERC has refused to even include in  
your analysis the impacts of increased fracking throughout gas basins in  
the Rockies. These impacts must be analyzed.

IND277-4

Information available from the U.S. Energy Information Administration  
discusses increased prices for all Americans that would result from gas  
exports. Price increases would not only raise gas prices for working  
Americans, but would result in a net loss of jobs due to yet more  
manufacturing moving overseas. We should be working towards energy  
independence, not exports.

IND277-5

Due to long term and in many cases permanent impacts on our climate,  
economy, forests and streams this project is clearly not in the public  
interest and would largely benefit a foreign gas company.

I urge you to deny this certificate.

Respectfully submitted,  
Sharon Rickman

**IND277 Sharon Rickman, Vancouver, WA**

- IND277-1 The EIS does not make a finding of public benefit; that discussion  
would be in the Commission Order, see section 1.3 of the EIS.
- IND277-2 Effects to threatened species are discussed in section 4.7. Water  
quality is discussed in section 4.6.
- IND277-3 See the responses to IND1-1 and IND6-1. Natural gas is the  
cleanest burning fossil fuel, and produces less pollutants than  
burning coal.
- IND277-4 See the response to IND1-3.
- IND277-5 See the responses to IND1-1 and IND6-1. Natural gas is the  
cleanest burning fossil fuel, and produces less pollutants than  
burning coal.

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IND278

**IND278 Dawn R. Granger, Charleston, OR**

IND278-1 Comment noted. See the analysis in section 3.4.2.2

Dawn R Granger, Charleston, OR.

Thank you for providing the FERC documentation on the Jordan Cove Liquefaction and pipeline projects for public review. I have studied the Draft Environmental Impact Statement and, after careful consideration, must agree with FERC's findings. Knowing that it is unavoidable that the community and environment will be affected, I find reassurance in this document and what I have heard at meetings. The protective measures which are articulated and have been discussed address all of my concerns and seem to address those I have heard from other entities. As someone who cares very much about not only our citizens but our unique natural habitat, I appreciate the comprehensive nature of the measures to be taken.

I am satisfied that FERC and JCE have created a plan which is as safe as possible while allowing for the least disruption during construction and afterward. I am asking that you please proceed with the permitting process to grant JCE their permit for this project. It is a good thing for our bay area and we need it to come to fruition.

In regards to the pipeline, I have reviewed the routes and ask that you look at the alternate Blue Ridge Route for the pipeline. Although both options look promising, and either would work, it appears that the Blue Ridge Route could be a less impactful to our communities, affecting fewer private parcels and posing fewer public safety issues.

Thank you.

IND278-1

20150209-0018 FERC PDF (Unofficial) 02/09/2015

IND279

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3542 Days Creek Road  
Days Creek, OR 97429  
February 1, 2015

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE., Room 1A  
Washington, DC 20426

ORIGINAL

Re: Pacific Connector Gas Pipeline LP Docket No. CP13-492-000 and Jordan Cove Energy  
Project LP Docket No. CP13-483-000

I would like to provide comment on the Draft Environmental Impact Statement for the planned  
Jordan Cove and Pacific Connector Pipeline Projects.

The Commission should not authorize the proposal because the proposed facilities would not be consistent with the public interest. The draft EIS does little to justify the position that an LNG pipeline favors public convenience and necessity. The draft EIS states that according to Jordan Cove's application, it would like to be the first LNG export terminal on the West Coast. It is untenable that FERC would deem a project worthy of authorization just because an applicant desires a certain outcome, especially if that outcome negatively affects the public. If the DEIS were to provide a logical, honest assessment, the statement of purpose would be to financially benefit a privately owned company (Canadian to date, but open to future purchase by any bidder worldwide) for the purpose of exporting energy resources to buyers in Asia. The benefit is that a private company stands to reap hundreds of millions of dollars – potentially billions – over the years from its sales of natural gas. There might be public acceptance if the project would actually be for the good of the larger community, such as a highway or power line, but that is not the case. The disclosure provided in the DEIS stating that the natural gas would originate from Canadian sources with potential increases in the future and the precedent agreements with Asian customers only highlights the fact that Oregon will serve as a convenient puppet to “pass-through” as profits designated for foreign entities are pumped through our region. We certainly hope that the Commission will more fully disclose the need for this project and how authorizing this project would be consistent with public interest, public convenience and necessity when making its decision on whether or not to authorize it.

DEIS primary purpose and need is disingenuous at best, as there is no need to construct the pipeline project if the intent is to supply additional volumes to markets in Oregon. The existing Ruby pipeline already provides an available conduit for natural gas supplies. Pacific Connector states that additional volume can be provided if a pipeline is extended from Malin to Coos Bay. There is no logic in this position, as natural gas already is available to Malin. Transporting this gas to a more distant location at Coos Bay does not create additional volume, it just sends it further along the line. Primarily, there is no need to transport natural gas to Jordan Cove if there is no export facility and constructing an export facility in Coos Bay would not be consistent with public interest.

IND279-1

IND279-2

**IND279 Dana P. and Roshanna Stone, Days Creek, OR**

IND279-1 See response to IND1-6.

IND279-2 The intent of the pipeline is to transport natural gas from Canadian and Rocky Mountain supplies to the Jordan Cove terminal where it would be liquefied to LNG for shipments to markets around the Pacific Rim.

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When the EIS was published five years ago, 141 separate mitigations were recommended by FERC's staff. As the 2014 DEIS now lists 106 separate mitigations, it doesn't appear that much progress has been made to adequately resolve potential environmental consequences. With the number of mitigations still to be met, can the Commission logically endorse authorizing a decision now? Shouldn't a decision be postponed until a future time when mitigating conditions are fulfilled? Until then, the public is left with a "trust me to do the right thing" situation from pipeline applicants. Unfortunately, a desire for profit mixed with politics doesn't usually result in an ethical outcome and almost certainly foreshadows weakened regulations (i.e. adequate fulfillment of mitigation conditions). These mitigations reflect the number of environmental and social concerns that remain unresolved through the environmental analysis process. Fatal flaws continue to exist with the project, whether through project design, project location, or via truncated or untruthful community relations.

It is unclear from the document exactly what the ramifications are if the applicant does not fulfill mitigation requirements such as those under the heading "mitigations required prior to the end of the comment period on the draft EIS". What will occur if these are not completed? Will additional time be allowed to the applicant unconditionally until such mitigations are complete? Will it be assumed that the applicant cannot be counted on to comply as needed to meet prescribed regulatory requirements? It would appear that if a timeframe cannot be met that the Commission should table a decision.

The DEIS outlined potential "greater than significant levels" of risk affiliated with construction of an underground pipeline at landslide sites at MP18.1, 18.2 and MP36.9. The mitigation proposed to address this risk is not adequate. Regular monitoring prescribed in the Erosion Control & Revegetation Plan (ECRP) will not serve to alleviate the risk. Severe landslides are not a rare occurrence in the Pacific Northwest region and are well documented. The only risk-free alternative would be to reroute the pipeline to avoid these areas.

The DEIS asserts that there are few private wells that would be affected in the pipeline corridor and vicinity. The document further claims that none of these wells are currently being used for domestic use. Many miles along the pipeline route have not been accurately assessed using thorough ground survey methods as landowners have not permitted access. We believe that there is risk of contamination or damage to viability of below ground aquifers that do serve private potable water sources such as wells and springs. As an example, we obtain domestic water from an underground well located less than a thousand feet from proposed pipeline activities. We are concerned that our domestic water will be affected and do not believe that the DEIS presents reliable data regarding potential effect to domestic water sources.

The DEIS does not adequately disclose violations/safety issues and how past compliance actions have been addressed in the industry. The document states that once the pipeline is in operation, conformance and deficiency logs will be required. What is not addressed is a disclosure regarding past problems with LNG and pipeline companies, the nature of the non-conforming actions, how often and prevalent these deficiencies are, the number and amount of fines, disciplinary, and remedial actions taken by FERC or other regulatory agencies. What we are left

IND279-3

IND279-4

IND279-5

IND279-6

IND279-7

## IND279 Continued, page 2 of 3

- IND279-3 The project analyzed in the 2009 FEIS was never built; therefore, no mitigation was implemented. The Project analysis began with the application to build an export terminal and associated pipeline.
- IND279-4 If the Commission decides to authorize this Project, staff would not allow construction to begin until after all pre-construction mitigation measures have been implemented.
- IND279-5 As disclosed in section 4.2.2.2, there are areas with greater landslide risk. We have recommended a condition that would require Pacific Connector to have a professional develop final monitoring protocols at landslide areas not previously examined.
- IND279-6 Many domestic water supply wells are not registered or identified in publicly available state databases, and therefore not all wells in the vicinity of the proposed pipeline have been identified. This is explained in section 4.4.1.2 of the draft EIS. Pacific Connector would verify exact locations of water supply wells, springs, and seeps during easement negotiations with landowners. We have recommended a condition that would require Pacific Connector to file a revised Groundwater Supply Monitoring and Mitigation Plan prior to construction that identified all wells, springs, and water supplies within 150 feet of the pipeline.
- IND279-7 Compliance with federal safety standards is administered by DOT, not FERC.

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with is a promise that these companies will abide by the necessary regulations and conditions, without a detailed analysis of past conformance to regulatory procedures. This would allow readers a framework for comparing potential risk factors.

IND279-7  
cont.

We, and many of our neighbors and friends, believe this project is not just unnecessary, but detrimental. We request that the FERC provide documentation on just how the export proposal can be considered "consistent with the public interest" to justify the use of "eminent domain". We urge you to "reshape America's destiny" promoting using non-polluting energy sources that sustain our planet and taking a critical look at proposals that do not provide long-term benefit. We do hope you will fulfill your duty as public servants to serve the American public openly and fairly.

IND279-8

Thank you for the opportunity to provide comments to the public record for this project.

*Dana P. Stone*

*Roshanna Stone*

Dana P. Stone  
Roshanna Stone

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**IND279**      **Continued, page 3 of 3**

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IND279-8      The Commission will determine if the Project is in the public interest in its Order.



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ORIGINAL

1/31/15

IND280

Re: Docket Numbers CP13-483 and CP13-492

I am strongly OPPOSED.

The Jordan Cove Pipeline provides  
no benefit to the people who live  
on (and own) the land through  
which it passes.

It does benefit a foreign  
corporation.

It is dangerous and threatens  
the ecology of this area and the  
vitality of life here. Corporations, while  
<sup>possibly</sup> following the letter of the law, do not  
necessarily invest in the well-being of  
the environment they destroy with their  
practices geared toward extracting financial  
benefit ~~at the~~ with low investment. We  
have seen this again and again. Not in  
my backyard. Not on my watch.

Deborah Leff  
2272 Jasmine Ave  
Medford, OR 97501

**IND280 Deborah Leff, Medford, OR**

IND280-1 The EIS does not make a finding of public benefit; the Commission would discuss that in its Project Order. Safety is addressed in section 4.13. The DEIS concluded that adverse impacts on specific resources could be mitigated, so that the Project would not destroy the local ecology.

20150209-0026 FERC PDF (Unofficial) 02/09/2015

ORIGINAL

IND281

Kimberly Bose, Secretary,  
FERC, 888 First St. NE,  
Room 1A, Washington DC 20426.  
Docket Numbers CP13-483 and CP13-492.  
1/31/2015

**Re: I am OPPOSED to the Jordan Cove Pipeline**

Dear Kimberly Bose, Secretary

This letter is to let you know that as a long-term resident of Douglas county, I am opposed to the proposed LNG pipeline in Oregon and against any resulting increase in pollution and damage to the environment. It's wrong for a private company to claim eminent domain against protesting landowners. It's a dangerous project and just plain wrong and against the public interest.

Please don't approve this project.

Sincerely,

Tara Hanson  
PO Box 307  
Canyonville, OR 97417

2015 FEB 9  
10:10 AM  
ORIGINAL

IND281-1

**IND281 Tara Hanson, Canyonville, OR**

IND281-1 The DEIS found that construction and operation of the Project would result in some limited adverse environmental impacts. However, most of these impacts would be reduced to less-than-significant levels with the implementation of the applicants' proposed mitigation measures and the additional measures we recommend in the EIS. See response to comment IND38-5.

20150209-0027 FERC PDF (Unofficial) 02/09/2015

IND282

**IND282 Anne Stine, Ashland, OR**

IND282-1 Comment noted.

## Wilderness Rites

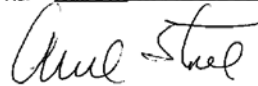
Ecopsychology • Wilderness Vision Quests • Earth-Based Healing Practices

Kimberly Bose,  
Secretary FERC  
888 First St., NE, Room 1A  
Washington DC 20424

Docket #: CP13-483 and CP13-492.

Re: **I AM STRONGLY OPPOSED TO THE JORDAN COVER PIPELINE**

IND282-1



**ANNE STINE**

2015 FEB 9  
10:00-9:30 AM  
JAN 31

Anne Stine M.A., MFT • 206 Sleepy Hollow Dr., Ashland, Oregon, 97520  
astine@wildernessrites.com • www.wildernessrites.com; 541-488-4899

20150209-0030 FERC PDF (Unofficial) 02/09/2015

Kimberly Bose, Secretary  
Federal Energy Regulatory Commission  
888 First St. NE, Rm. 1A  
Washington D.C. 20426

RE: Docket No. CP13-483 and CP13-492

Dear Secretary Bose,

I am writing you because I totally oppose the proposed Jordan Cove LNG Project. It poses huge environmental threats, would contribute to increased climate change, forces Canadian-controlled Eminent Domain upon Oregon citizens, and would support increased fracking, a process that is highly polluting in itself.

Why would we do this to our beautiful state and country, as well as our citizens, just to export our resources? The DOE claims that it would cause 1.2 million jobs to move overseas!

If the U.S.A. has short supplies of fossil fuels, this is an insane short-term attempt to solve larger problems that need our attention now! This is not a time that we should be exporting our precious resources, or risking/destroying our environment.

Please do everything you can to oppose this dangerous proposal!

Thank you.

Sincerely,

Trish Haas

Trish Haas  
1630 Williams Hwy.  
Grants Pass, OR 97527

ORIGINAL  
2015 FEB-9  
10:18:52  
IND283-1

**IND283 Trish Haas, Grants Pass, OR**

IND283-1 The DEIS found that construction and operation of the Project would result in some limited adverse environmental impacts. However, most of these impacts would be reduced to less-than-significant levels with the implementation of the applicants' proposed mitigation measures and the additional measures we recommend in the EIS. See response to comments IND1-1, IND6-1, and IND38-5. A 2012 report for the DOE found that the nation is "...projected to gain net economic benefits from allowing LNG exports."

20150211-5005 FERC PDF (Unofficial) 2/10/2015 11:11:11 PM

IND284

Dee Packard, Portland, OR.  
Please! There is so much wrong with a Canadian corporation  
or any corporation building a massive LNG infrastructure through our  
forests, exempting the rules to protect owls, salmon, and other  
endangered wildlife. Please tell me why this project  
has even gotten this far. With toxic Methane, 85% more dangerous to our  
atmosphere and our life being released, why is this even being  
considered. I am so confused.

IND284-1

90% of the 300 landowners who would be directly affected have refused  
access to the company. What gives Veresen the right--well, you do, if  
you do--to clearcut thousands of acres in Southern Oregon and tunnel  
under many many streams and rivers. This land is our wealth and belongs  
to all of us, and the continuity the ecosystem is our most precious  
resource. And you are considering the most assured disruption of it for  
what? Veresen's profits?

IND284-2

IND284-3

Please remember the precious land is our mother, so to speak.  
Please do not sell Her out, nor us. Use of eminent domain has a  
requirement: It must be in service to the public good and not for a for-  
profit pipeline. Please don't violate the integrity of eminent domain.

IND284-4

And if you should say yes, remember that it is us, our children and all  
the children of future generations, and Nature itself who will most  
certainly become the collateral damage of this enterprise.

Please remember what sustains and enriches life here.

Thank you!

## IND284 Dee Packard, Portland, OR

- IND284-1 We are analyzing this Project because Jordan Cove and Pacific Connector filed applications with the FERC to build an LNG export terminal and associated natural gas pipeline. No environmental rules would be exempted. The protection of wildlife is discussed in section 4.6 of the EIS, and forests in section 4.5. Air quality is addressed in section 4.12. FERC jurisdictional natural gas transmission pipelines rarely leak methane; and if they do, the amount leaked is very small.
- IND284-2 The U.S. Congress decided to convey the power of eminent domain to private companies that receive a Certificate from the FERC when it passed section 7(h) of the NGA in 1947.
- IND284-3 The DEIS found that construction and operation of the Project would result in some limited adverse environmental impacts. However, most of these impacts would be reduced to less-than-significant levels with the implementation of the applicants' proposed mitigation measures and the additional measures we recommend in the EIS. The land does not "belong to all of us;" 68 percent of the pipeline route would cross lands owned by private individuals or entities.
- IND284-4 In its Order, the Commission would decide whether or not this Project is for the public good.

20150211-5009 FERC PDF (Unofficial) 2/11/2015 4:16:19 AM

IND285

**IND285 Chris Andreea, Troutdale, OR**

Chris Andreea, Troutdale, OR.

Greetings;

I was born in Oregon. My family, the Pittock Leadbetter family, built this State. The proposed LNG terminal at Jordan Cove will never produce the revenue that will be required in the event of a mishap of any kind, man-made or an act of nature. The lost cannot ever be reclaimed. Even if all goes well, the project is just not worth it: this is a funnel pouring profits out of Oregon and into foreign banks. There are some very smart people involved in this venture and it appears to me that everyone sees the folly. It is not too late to cut bait. And if the corporate muscle pushing the project realizes that there are better, safer, faster ways to see serious return on investment, we will all be richer in the end. We just cannot afford the longterm loss the project faces. And we, Oregonians, will live with for generations to come.

Regards,

Chris Andreea

IND285-1

IND285-1 The DEIS found that construction and operation of the Project would result in some limited adverse environmental impacts. However, most of these impacts would be reduced to less-than-significant levels with the implementation of the applicants' proposed mitigation measures and the additional measures we recommend in the EIS. Safety is addressed in section 4.13 of the EIS.

20150211-5007 FERC PDF (Unofficial) 2/11/2015 1:14:10 AM

IND286

**IND286 Sandra Duncan, Talent, OR**

Sandra Duncan, Talent, OR.  
My family and I strongly oppose the implementation of the Jordan Cove Energy Project. We live in the Rogue valley and want it to remain as pristine as possible. We oppose this project due to strong environmental concerns and concerns for the safety of our community. Thank you for your support in keeping Oregon beautiful!! We want nothing to do with fracking, and the environmental hazards it comes with. I strongly appeal to your common sense and love for your citizens and your environment. You are a good steward of your land by not allowing this project to be approved.  
THANK YOU!!!!

IND286-1

IND286-1 The Rogue River valley is not pristine. Its environment has been modified by human activities for thousands of years. See response to comment IND6-1.

20150211-5012 FERC PDF (Unofficial) 2/11/2015 6:04:41 AM

IND287

**IND287 Renee Cote, Wolf Creek, OR**

Renee Cote, Wolf Creek, OR.

I am strongly OPPOSED to the LNG Pipeline and the Jordan Cove Terminal.  
ABSOLUTELY AGAINST BOTH PROJECTS.

I am part of the Oregon Women's Land Trust. This pipeline will destroy  
our land and it will be impossible to fulfill our mission.

For what? Greed.

About Jobs: most politicians have been repeating that these projects will  
give jobs to Oregonians. NOT TRUE. Possibly a few temporary jobs to  
Oregonians, mostly jobs to non-Oregonians. I have attended Hearings in  
Southern Oregon and it is clearly documented.

Veresen is a Canadian corporation which will benefit and make profits.  
Not the Oregonians. IT IS NOT IN OUR INTEREST.

Environment  
In a time of fast climate change, we all need to work together and solve  
the problems rural areas, cities and countries are facing: inundations,  
extreme temperature, too hot, too cold, etc.

Both the terminal and the pipeline are potential disasters: earthquakes,  
explosions, water pollution, destruction of old forests, fish and animals  
will lose their natural habitat, and the list is long.

THIS IS DESTRUCTION WHEN WE NEED RESTORATION.

I urge FERC to DENY the application for both the Terminal and the  
Pipeline.

IND287-1

IND287-1 Potential impacts on the Oregon Womens Land Trust Farm are  
discussed in section 3.4.2.7 of the EIS. Jobs are discussed in  
section 4.9. The EIS addresses impacts on forests in section 4.5,  
fish and wildlife in section 4.6, potential seismic activity in 4.2,  
and safety in 4.13. The Commission would determine public  
benefits in the Project Order. See response to comment IND1-1.



20150209-0037 FERC PDF (Unofficial) 02/09/2015

Feb. 1, 2015

Kimberly Bose, Secretary  
FERC  
888 1st St. NE, Room 1A  
Washington, DC 20426

Re: Docket numbers: CP13-483 and CP13-492

I am very concerned about the move to authorize the building of  
a LNG terminal + pipeline. I urge you not to be swayed by the  
very short term financial earnings of those who seek to build these  
facilities, and pay very careful attention to the long term  
consequences for our environment + all the residents (human +  
non-human).

I do not approve of this development.

Thank you for your attention.

Sarita Lief  
174 W K Street  
Springfield, OR 97477

C.C. Senator Ron Wyden  
Senator Jeff Merkley  
Gov. John Kitzhaber

2015 FEB 9  
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FEB 9 2015  
U.S. DEPT. OF ENERGY  
WASHINGTON, DC

IND288

**IND288 Sarita Lief, Springfield, OR**

IND288-1 The EIS pays attention to consequences and impacts on the  
environment and residents in the project area.

IND288-1

20150210-0025 FERC PDF (Unofficial) 02/10/2015

IND289

Kimberly D. Bose, Secretary  
FERC  
888 First Street NE, Room 1A  
Washington, DC 20426

ORIGINAL

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SECRETARY OF THE  
COMMISSION  
2015 FEB 10 A 11:32  
FEDERAL ENERGY  
REGULATORY COMMISSION

February 4, 2015

OEP/DG2E/Gas 3  
Jordan Cove Energy Project, L.P.  
Docket No. CP13-483-000  
Pacific Connector Gas Pipeline, L.P.  
Docket No. CP13-492-000  
FERC/EIS-0256D  
Comments on Draft EIS for the Jordan Cove Project

The Draft EIS for the Jordan Cove Project is deeply troubling. I am especially concerned, first, with the question of the need for the project. According to NEPA, the EIS must "specify the underlying purpose and need to which the agency is responding..." The statement of need is key in helping the public to understand the point of this environmentally dangerous project. Yet, the DEIS says "The purpose and need for the proposed Project...was defined by Jordan Cove," which traces back to fulfill the "robust international demand for natural gas" by exporting "competitively priced natural gas from western Canadian and Rocky Mountain sources." FERC has thus allowed the petitioner to define the need for the project. This is unacceptable. Is it that there is no PUBLIC need for this project, only the need of a private, foreign company to earn money for itself and its investors?

IND289-1

"The EIS should reflect not only the FERC's purpose, but also the broader public interest and need. We recommend discussing the proposed project in the context of the larger energy market, including existing export capacity and export capacity under application to the Department of Energy, and clearly describe how the need for the proposed action has been determined." (EPA, "Scoping Comments – The Jordan Cove Energy Project," October 29, 2012, p. 3) With these words the U.S. Environmental Protection Agency (EPA) described the job of the EIS. It is obvious this has not been done. Jordan Cove will be the largest project in the state of Oregon and it is imperative that the American public understand the vital need that forces dangerous dredging and other major alterations to our Bay, to the

IND289-2

## IND289 Carol Sanders, Coos Bay, OR

IND289-1 See the response to IND3-4.

IND289-2 The Commission would determine public interest and need in its Project Order.

20150210-0025 FERC PDF (Unofficial) 02/10/2015

North Spit, to the air and over-all environment of Coos County, as well as land in Douglas, Jackson, and Klamath counties. Again, is it there is no public need, only private corporate greed?

Another area of great concern is the air pollution the Jordan Cove project would bring to the coast of Oregon. The goals of the 2007 Oregon House Bill 3543 to reduce greenhouse gas emissions would be completely undermined by the building and operation of this project. Angus Duncan, Chairman of the Oregon Global Warming Commission, a body created by the Oregon Legislature to recommend ways to reduce greenhouse gas emissions, stated that Jordan Cove will hurt Oregon's ability to meet the commission's goals. To avoid catastrophic results of global warming, climate scientists say the U.S. should be reducing its carbon emissions by 6 percent a year. Instead, Jordan Cove would increase them. We owe it to our children and their children to leave our world a better place. Allowing the pollution of our air resulting from both construction and operation of this project displays our greed, selfishness, and short-sightedness to our posterity.

Lastly is an ignored issue, which lawyers and politicians claim is irrelevant. But those of us with a conscience realize the gross injustice of depriving United States citizens of their private property, through the use of eminent domain, in order to construct a pipeline to deliver natural gas to Jordan Cove to be liquefied and transported to foreign counties. Only some far-reaching public benefit would justify such seizure of property, but doing this to enrich a private foreign corporation, Veresen, based in Alberta, Canada, is a gross infringement of the rights of United States citizens, especially those rights specified in the 5<sup>th</sup> Amendment to the Constitution of the United States.

For these reasons and a host of others which many good people are raising in their reviews of Jordan Cove's draft EIS, this project should not be sanctioned by the Federal Energy Regulatory Commission.

Very Sincerely,



Carol Sanders

664 S. Empire Boulevard  
Coos Bay, OR 97420

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**IND289 Continued, page 2 of 2**

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IND289-3 See the response to IND1-1. See the analysis of pollutants likely to be released by the Jordan Cove facilities in section 4.12. 1.1.

IND289-4 The U.S. Congress decided to convey the power of eminent domain to private companies that receive a Certificate from the FERC when it passed section 7(h) of the NGA in 1947.

IND289-3

IND289-4

20150210-0041 FERC PDF (Unofficial) 02/10/2015

Robert O. Clarke  
TREE & ENERGY FARM  
P.O. Box 82  
Tenmile, OR 97481

February 5, 2015

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE, Room 1A  
Washington, D.C. 20426

Project Docket CP-13-492-000

Greetings Fellow Citizens:

I am writing to you to inform you of a geological hazard on our property that is in close proximity to the easement of the proposed Pacific Connector Pipeline, or the P.C.P. Said hazard consists of an unstable slope weakened by old logging skid roads. After looking at the Draft E.I.S., I could not locate any maps for my area. I believe if there was a map it would have been located in the Draft E.I.S., Volume I, chapter 3 between pages 32-36. Therefore, due to the lack of pertinent information in the Draft E.I.S., I will not be commenting on the Draft E.I.S. directly, but submitting my own information.

This information consists of a report on the landslide by a forestry consultant, as well as maps of our property, including an older map showing the pipeline location when it was proposed as an import pipeline. Hopefully this additional information will help you locate said landslide. This hazard affects our only access to this piece of property which is needed for proper management and income. I really hope that the recommendations in Volume II, chapter 5 are retained in the Final E.I.S., particularly recommendation #48, page 36. It is my understanding that eminent domain only gives the P.C.P. 95 ft. of construction easement. Therefore any damage to our property outside that easement is not allowed by eminent domain and is litigious. Before any construction begins on our land, we will have in hand, plans from a certified soils engineer to stabilize the slope.

Having addressed the landslide issue, I would like to move on to the affect the P.C.P. would have on my small wood products business. The loss of the tree growing land is a major concern. As one of my products is bio-mass, we tend to harvest more frequently and smaller diameter trees. We allow hardwoods to resprout on the stump and reharvest in a short period of time (approximately 10 years).

My best selling product is madrone firewood, but we also produce wood suitable for barbecues. We also have the ability to produce lumber, but we are not marketing lumber at this time. I think instead of the usage of industry standards for fair market value, each individual affected business or landowner should be compensated for their true impacts or losses. For instance, chip price for small diameter wood is around 41 dollars per ton. I receive more than three times that amount for the same wood cut into firewood. When the easement can be replanted, I would want it to be replanted in

CP13-492  
FILED  
SECRETARY OF THE  
COMMISSION  
2015 FEB 10 A 11:47  
FEDERAL ENERGY  
REGULATORY COMMISSION

ORIGINAL

**IND290 Robert O. Clarke, Tenmile, OR**

- IND290-1 Detailed maps of the proposed pipeline route are located in Appendix C to the EIS. The attached report was considered when making revisions to the FEIS. Landslide risks are described in section 4.2.2.2 of the EIS.
- IND290-2 Pacific Connector would first seek a negotiated mutual agreement with landowners, so that eminent domain would be unnecessary. Pacific Connector would compensate landowners for damages, including loss of timber. FERC has no role in this process.

IND290-1

IND290-2

20150210-0041 FERC PDF {Unofficial} 02/10/2015

-2-

madrone, but I don't think it would be commercially available. All madrone removed during construction would not be replaced by P.C.P.

Now, I want to challenge the assertion the people working for P.C.P. have made that we denied them access for this project. This is false. Employees were on our property for 4 days in 2006, most of that time spent on neighboring properties. After lying to us about the location of the proposed P.C.P., they were kicked off.

IND290-3

In closing, I was curious to know how many individual energy producers would be negatively affected by the P.C.P. and Jordan Cove Project directly. For instance, how many bio-mass, bio-fuel, wind and solar energy producers are being affected by the construction of the P.C.P. on their lands.

IND290-4

I think the Draft E.I.S. and the Final E.I.S. should include that information. I also think that the taking of land by the government, of one energy producer to give to a competing energy producer should be illegal. It reeks of malicious behavior and fraud by P.C.P. and the U.S. government.

I want to thank you for your time in considering these matters.

Respectfully,

Robert O. Clarke

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**IND290**      **Continued, page 2 of 9**

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IND290-3      Comment noted.

IND290-4      The DEIS analyzes the environmental effects of the proposed Project. Renewable energy production is beyond the scope of the FERC analysis.

 **Barnes & Associates, Inc.**  
3000 Stewart Parkway, Suite 204, Roseburg, OR 97471  
Ph: 541/673-1208 Fax: 541/673-9789 www.barnesinc.com

**Project Docket**  
**CP-13-492-000**

February 4, 2015

Robert Clarke  
1102 Twin Oaks Lane  
Winston, OR 97496

Re: Williams pipeline request to cross property

Dear Mr. Clarke:

Per your request I visited your family property with you on January 23<sup>rd</sup>, 2015 to inspect the forest conditions in the vicinity of the location of the proposed pipeline on your property. The property is located approximately 5 miles southwest of the City of Winston in Douglas County, Oregon. Following are my findings:

**Subject property:**

The subject property is owned by the J A Clarke Oregon Family Trust and the John A Clarke Family Trust. The tax lots as established by the Douglas County Assessor are as follows:

**J A Clarke Oregon Family Trust ownership**

Tax Lot 200, Section 1, T29S, R7W, W.M., 74.77 acres  
Tax Lot 500, Section 1, T29S, R7W, W.M., 5.0 acres

**John A Clarke Family Trust ownership**

Tax Lot 300, Section 1, T29S, R7W, W.M., 72.11 acres  
Tax Lot 400, Section 1, T29S, R7W, W.M., 7.5 acres

**General Description of the property:**

There are two residence on the subject property. In Tax Lot 400 is the residence for John Clarke and in Tax Lot 500 is the residence for Robert Clarke. See the attached map for the location of the tax lots and residences as well as a rough estimate of the proposed pipeline location. Both of these residence are located near Weaver Creek with steep hills above their homes.

The headwalls of Weaver Creek are located above Robert Clarke's house. The headwalls are approximately 80 percent slope with some short pitches nearing 100 percent slopes. The slopes are westerly slopes located near the south and southeast portion of Tax Lot 200.

Likewise, for John Clarke's residence there is an unnamed tributary of Weaver Creek that flows from the ridge to the north of the residence and flows southerly down into Weaver Creek near the residence. This drainage has slopes in some areas that exceed 70 percent in a few locations. A contour map is included showing the location of these steep slopes in relation to the residences.

20150211-5110 FERC PDF (Unofficial) 2/11/2015 11:08:05 AM

IND291

**IND291 Gary Moore, Portland, OR**

IND291-1 Comment noted.

Gary Moore, Portland, OR.

I writing you in support of the Jordan Cove LNG Terminal and the Pacific Connector gas pipeline. This is a great project for the men and women of Oregon, this project will but back to worker back to work and keep them employed for sometime with good wages and benifits. This will keep the skilled journey workers and apprentices working. Also this will bring a great tax base for Coos Bay and Oregon. This project will also bring money to all the small business for many years and after the project is built it will provide family wage jobs to operate the facility. Im in full support of the project and it must be built to keep Oregon strong. Gary Moore

IND291-1

20150211-5114 FERC PDF (Unofficial) 2/11/2015 11:21:20 AM

IND292

**IND292**     **Zack Culver, Yamhill, OR**

IND292-1     Comment noted.

Zack Culver, Yamhill, AL.  
As An Oregonian and Business Representative of Laborers Local 296 of Oregon. I would ask that you approve the Jordan Cove and Pacific Connector Projects. We as an industry recovering from one of the biggest down turns I have seen. The Southern Oregon economy could definitely use the Jobs and Tax base increase from these projects. I know the total Permanent Jobs created is around 200 but these are family wage jobs with benefits. good for supporting a family and local businesses in the area. The opportunity for the fuel resource to be potentially available to the other southern counties. Over the long term could potentially draw businesses to the area as a competitive place to do business. Further Oregon needs to be a place that business want to invest in because of there ability to approve and get projects like this done. Instead of having to find other places to invest.

IND292-1



20150211-5118 FERC PDF (Unofficial) 2/11/2015 11:24:03 AM

IND293

**IND293 Jack, Portland, OR**

IND293-1 Comment noted.

jack, Portland, OR.  
I am writing to support the Jordan Cove LNG Terminal and the Pacific  
Connector Gas Pipeline. These projects will provide thousands of good  
paying jobs for more than three years employing many Oregonians who are  
Laborers, welders, and Electricians,etc. These are highly skilled  
craftspeople who will build a safe facility that will last for decades.  
This facility will help revitalize the Port of Coos Bay and will bring  
new business opportunities to southern Oregon by increasing the available  
supply of natural gas. After more than 10 years of study and analysis, it  
is time to approve this project so we can build this project and bring  
prosperity to a part of Oregon that needs it

IND293-1

20150212-5004 FERC PDF (Unofficial) 2/11/2015 8:25:37 PM

IND294

Jen Velinty, Florence, OR.  
Impacts of the proposed Jordan Cove LNG pipeline and export facility in North Bend-Coos Bay OR. to the health and safety of the local community, private property owners and fishermen, ocean resource industries, Public Land timber resources, communal utilities, roads, airport, port, rail, recreational tourist industry of the central and southwest counties of OR. Please consider as many as 400 bodies of water within the impact zone. The disruption of successful and ongoing salmon rehabilitation efforts for the past 25 years of restoring wild salmon habitat, improving stream beds to promote viability of juvenile salmon migrating from spawning grounds to the river estuaries and Pacific Ocean. The damage to the sustainable oyster and shell fish industries that have slowly recovered from previous damage. The OR crab industry is a sustainable and job creating industry that is unique in the US. The loss of value for property owners impacted by eminent domain rights awarded to a Canadian company to take U.S private property for private profits and with no "public benefit" to the community loss of property rights.

IND294-1

The increasing number of established business failures as residents move to safer areas and the loss of longer term recreational and overnight tourist trade hesitant to vacation in the area.

The portfolio of other LNG facilities that have failed and sit abandoned as a continuing reminder of the boom and bust energy industry failing to deliver on promises of instant long term wealth.

## IND294 Jen Velinty, Florence, OR

IND294-1 Waterbody crossings are discussed in section 4.4.2.2 and 4.6.2.3 of the EIS. Potential impacts on private property and commercial fishing is addressed in section 4.9, recreation in section 4.8, transportation in 4.10, and aquatic resources in section 4.5.

20150212-5010 FERC PDF (Unofficial) 2/11/2015 11:32:50 PM

IND295

**IND295 Brenda Schweitzer, Talent, OR**

IND295-1 Impacts on federal lands are covered in section 4.1 of the EIS. Threatened and endangered species are addressed in section 4.7. Jobs and impacts on private property are discussed in section 4.9. See our response to comment IND6-1.

Brenda Schweitzer, Talent, OR.  
I am writing regarding (CP13-483-000 and CP13-492-000). I am urging a declination of this project for a variety of reason primarily the environmental impacts this project will create.

Approximately 80 miles of the pipeline would cross public land on the Rogue River/Siskiyou, Umpqua and Winema/Fremont National Forests as well as the Medford and Coos Bay Districts of the BLM. The pipeline would create a linear 95-foot wide clearcut, and in doing so, would degrade and fragment forest habitat for endangered species, increase erosion, cut forests in old-growth reserves and in and riparian reserves and open up a highway for invasive species and ORV use.

The project would impact twenty-nine federally endangered or threatened species, including Coho salmon, marbled murrelet, northern spotted owl, six species of whale and four species sea turtle. Extensive dredging for terminal construction in the Coos Bay estuary would have an enormous impact on sensitive estuarine habitats and marine species: the amount of material that would be dredged out of the estuary would fill the Rose Bowl stadium in Pasadena nearly 14 times.

I have lived close to a community where "fracking" (Pinedale, WY) was a part of life and the people believed it was worth the environmental price until the realized their children were developing chronic lung issues at the age of 3-5, their wells were no longer safe to drink from and the air quality in the region was more often unsafe than safe.

The sheer fact the neither Washington or California allow such a pipeline to be placed in their state with access at their coastline tells many people that Oregon is behind the 8 ball. The short sightedness of short-term jobs and economic increase during construction is certainly not worth the long-term loss of clean air, water and safe public and private lands. This Canadian Company, Veresen, has had 3 fires/explosions in the last year - they certainly are not looking out for anyone's safety!

Approximately 150 miles of the 230-mile pipeline would be on private property. Over 300 private landowners are threatened with the use of eminent domain for the pipeline right-of-way. Landowners would likely receive a small one-time payment for the pipeline running across their property, while they would lose access and endure limitations on that right-of-way such as: an inability to plant crops with deep roots, lack of access with heavy equipment, and a clearing of all brush and trees. A majority of impacted landowners are opposed to the project.

For these reasons and so many others please deny any further action on projects CP13-483-000 and CP13-492-000.

IND295-1

Thank you for your time and consideration.

20150212-5026 FERC PDF (Unofficial) 2/11/2015 10:58:14 PM

IND296

Dear FERC Staff,

The DEIS provides faulted, inadequate and misleading analysis of the pipeline alignment and its effect to residential water supplies.

According to Table 3.4.2.2-1, water supply wells within 50' of the construction right of way are as follows:

- 1) Proposed = 1
- 2) Blue Ridge = 0

The Draft EIS fails to provide any real analysis of and/or any real statistics for the impact to residential water supplies and/or wells on the proposed route versus the Blue Ridge route.

1. The proposed route has over 50 homes that are within 1000' of the right of way. Many of these homes do not have wells but instead get their water from year round springs and streams. The crossing of these springs and streams, which the proposed alignment will do, will have an extremely adverse effect on residential water supplies.
2. On the proposed route, those homes which have wells are shallow wells and many of which are hand dug. The water table is "soft" and thus the underground water that fills these wells will be adversely affected in many cases. The construction of the pipeline will have a significant negative effect to many existing wells.

Note: The Blue Ridge route has only 2 homes that are near the pipeline. The owners of those homes agree with the pipeline and agree that it should be on Blue Ridge. Their water supply is above the pipeline and their water supply will not be affected.

Sincerely,  
Ron Foord, affected landowner

**IND296 Ron Foord**

IND296-1 The Blue Ridge alternative and the corresponding portion of the proposed route are compared in section 3.4.2.2.

IND296-1

20150212-5027 FERC PDF (Unofficial) 2/11/2015 10:43:39 PM

IND297

FERC Staff,

The DEIS provides an inadequate analysis of the effect on human habitat along the proposed route (between MP 11.1R and MP 21.8) versus the Blue Ridge route.

According to Table 3.4.2.2-1 Number of landowner parcels crossed are as follows:

- Proposed = 61 parcels
- Blue Ridge = 23 parcels

This statistic is incomplete because it fails to ask or answer the question – "How many parcels with homes are crossed?"

a. Proposed route – parcels crossed with homes on the parcel:  
Total parcels with homes = 33

b. Blue Ridge route – parcels crossed with homes on the parcel:  
Total parcels with homes = 3

Sincerely,  
Nova and Ellen Lovell

IND297-1

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**IND297 Nova and Ellen Lovell**

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IND297-1 The Blue Ridge alternative and the corresponding portion of the proposed route are compared in section 3.4.2.2 using available (desk-top) data.

20150212-5033 FERC PDF (Unofficial) 2/12/2015 7:57:58 AM

IND298

Scott McKay, Medford, OR.

Thank you for the opportunity to comment on the Jordan Cove Pipeline project.

The Jordan Cove Pipeline project offers little benefit to the people most adversely affected. The profits go to a foreign corporation, the energy goes to a foreign country and the mess they create is borne by the people of the United States.

The project provides no net energy gain for anyone in the United States. As our Federal Energy Regulatory Commission, you are given no basis to approve the Jordan Cove Pipeline project.

The local newspaper (Mail Tribune, Medford, Oregon) reports that the benefit to my county, Jackson County, Oregon, population around 200,000, will be three million dollars annually in tax revenue – that's \$15 per person per year. I would not allow someone to build a trench through my front yard for \$15 a year; why would you allow someone to build a trench through southern Oregon for such small payback? Nor is their promise of jobs to build the pipeline a positive contribution: Natural gas produced by "fracking" and shipped by pipeline across hundreds of miles of wilderness is not part of a safe and sane energy future. There are still many homes whose roofs have not been converted to solar collectors; if engineers want to be a part of our energy future, they can find jobs helping us with that goal.

The Jordan Cove Pipeline project does not provide sufficient benefit to the people of the United States. If we are still a government of, by and for the people, the decision you need to make is clear. Please act for the people: do not allow the applicants to pursue this project further.

IND298-1

**IND298 Scott McKay, Medford, OR**

IND298-1 The Commission would determine public benefits in its Project Order.

20150209-0105 FERC PDF (Unofficial) 02/09/2015

1 february 2015

IND299

Kimberly Bose  
Secretary  
FERC  
888 First St. NE  
Room 1A  
Washington, DC 20426

ORIGINAL

CP13-483  
CP13-492

FILED  
OFFICE OF THE  
SECRETARY  
FEDERAL ENERGY  
REGULATORY  
COMMISSION  
2015 FEB -9 P 2:48

Subject: Jordan Cove LNG Terminal

I am writing to express my strong opposition to the proposed construction of a LNG Terminal and pipeline to Jordan Cove, Oregon,

- a) The site is vulnerable to tsunamis.
- b) The gas comes from fracking which comes with multiple environmental drawbacks.
- c) The pipeline would lead to a wide strip of deforestation and would cross many streams + rivers with significant potential for leaks, breaks and damage
- d) The LNG plant would be the second largest emitter of greenhouse gases in Oregon

Thank you for listening to my concerns.

P. C.  
Paul Barker  
29636 Butler Rd  
Junction City, Oregon 97448

**IND299 Paul Barker, Junction City, OR**

IND299-1 See the responses to IND1-4 for tsunami effects, IND1-3 for fracking, IND1-1 for GHG emissions. Effects on forests are discussed in section 4.5 and streams in 4.4.1.1.

20150209-0106 FERC PDF (Unofficial) 02/09/2015

ORIGINAL

IND300

ROBERT and JEAN POLLOCK 385 Oakview Drive Roseburg, Oregon 97471-7794 541.672.6794 rjpollock@triousa.com

2015 FEB -9 A.M. 9:38

February 2, 2015

CP13-483  
CP13-492

Kimberly Bose, Secretary  
Federal Energy Regulatory Commission  
888 First St. N.E.  
Washington, D. C. 20246

Dear Ms. Bose:

We are opposed to the Pacific Connector pipeline. It is irresponsible to place a 230-mile natural gas pipeline across an area where a major earthquake from the Cascadia Subduction Zone is overdue and anticipated. It would jeopardize wildlife and streams with a 100-foot wide strip that will have to be maintained by pesticide applications and further endanger aquatic life already compromised by poor water quality in many of the almost 400 waterways the pipeline would cross.

It is unacceptable to allow a foreign company to take our land by eminent domain to export natural gas to a foreign country; there must be a public benefit to allow the right of eminent domain, and there is none as shown by 90% of private landowners who object. A few jobs in Coos Bay are not sufficient to justify the destructive potential of the pipeline.

IND300-1

The liquified natural gas will be produced by fracking which is one of the most environmentally destructive methods of fossil fuel extraction. Apparently, FERC failed to consider the impacts of fracking in contributing to climate change.

IND300-2

The Jordan Cove terminal will emit 2.166 million tons of CO2 per year. Our ocean fisheries are already struggling, and increasing the acidity of the water by addition of more CO2 will only make it worse. The pipeline, terminal, and shipping, will affect 32 species protected under the Endangered Species Act.

Can you give us one good reason to approve this pipeline? We think not!

Sincerely,

  
Robert Pollock

  
Jean Pollock

**IND300 Robert and Jean Pollock, Roseburg, OR**

IND300-1 The U.S. Congress decided to convey the power of eminent domain to private companies that receive a Certificate from the FERC when it passed section 7(h) of the NGA in 1947. The Commission would determine public benefits in its Project Order. Jobs are discussed in section 4.9 of the EIS.

IND300-2 See responses to IND1-1, IND1-3, and IND6-1.



20150211-0033 FERC PDF (Unofficial) 02/11/2015

IND301 Anonymous

IND301

File date  
Feb. 11, 2015

DOCKET # CP13-483  
+ CP13-492 2-2-15  
ORIGINAL  
KIMBERLY BOSE,  
BESIDES THE FACTS ABOUT  
THE POLLUTING AFFECT ON THE  
ENVIRONMENT ESPECIALLY GROUND  
WATER + WELLS. FICKING IN  
MOVING US AWAY FROM OUR  
GOALS CONCERNING CLIMATE  
CHANGE. I LIVE NEAR THE  
PROPOSED ROUTE + GIVEN THE  
FACT THAT ACCIDENTS DO HAPPEN  
+ CLEAN UP'S ARE ONLY BANDAGES  
AT BEST, I AM VERY CONCERNED  
+ WHOLE HEARTEDLY OPPOSED  
TO THIS PROJECT FOR MORE  
THAN THE REASONS LISTED  
IN THE ATTACHED MATERIAL.  
I HAVE SEVERE CHEMICAL  
SENSATIVITIES FROM BEING  
POISONED IN 1990-1992. IT  
ALTERED (DESTROYED) MY LIFE,  
~~MY CAREER~~ CAREER + I LOST  
EVERYTHING. I KNOW FIRST

20150211-0033 FERC PDF (Unofficial) 02/11/2015

IND301 Continued, page 2 of 4

HAND WHAT TOXIC CHEMICALS  
CAN DO TO PEOPLE..

BESIDES THAT THIS IS A  
NO WIN FOR OREGON. IT  
ONLY BENEFITS MORE  
CORPORATE GREED IN THIS  
SITUATION.. AND OF A FOREIGN  
COUNTRY TO BOOT.

THIS IS UNACCEPTABLE!  
CORPORATE GREED IS  
POISONING OUR ENVIRONMENT  
(WHICH IN TURN POISONS US),  
DESTROYING FAIR PAYING JOBS,  
TAKING AWAY OUR RIGHTS FOR  
WHAT SO A FEW PEOPLE CAN  
GET UNZANELY WEALTHY.

THINK ABOUT WHAT THIS WILL  
MEAN FOR ALL OUR CHILDREN  
& GRANDCHILDREN (DO YOU LOVE  
YOURS? WHAT WILL THE WORLD  
YOU LEAVE THEM LOOK LIKE?)

20150211-0033 FERC PDF (Unofficial) 02/11/2015

**IND301 Continued, page 3 of 4**

The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-1-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. FERC failed to consider if this massive fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change. IND301-1

Natural gas is methane. A percentage of methane leaks unburned into the atmosphere when drilling, transporting and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. FERC failed to consider these climate impacts of LNG. IND301-2

The company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, FERC should have considered the cumulative impacts of fracking on our environment. IND301-3

FERC failed to consider the impacts of the LNG terminal being built in the earthquake subduction zone and tsunami area of Coos Bay. For instance, FERC failed to describe what could happen to the two 80-million-gallon tanks of liquefied natural gas if the power plant stopped working and the back-up power also failed, as did in Fukushima Japan. The LNG would immediately start to warm and expand. What then? IND301-4

Over 300 Oregon landowners are facing the threat of eminent domain from the 230-mile long pipeline needed to feed the LNG terminal. Veresen, a Canadian company is asking FERC to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Tell FERC not to give the right to a foreign company to condemn Oregonians land. IND301-5

FERC failed to consider an alternative that requires the pipeline through southern Oregon to be built to the same safety standards for the entire 230-miles. While the standards are set by the Department of Transportation, FERC should have considered the impacts of lower safety standards in the rough mountains of rural Oregon. Veresen IND301-6

- IND301-1 See the response to IND1-1.
- IND301-2 See the response to IND1-2.
- IND301-3 See the response to IND1-2.
- IND301-4 See the response to IND1-4.
- IND301-5 See the response to IND1-5.
- IND301-6 See the response to IND1-7.

20150211-0033 FERC PDF (Unofficial) 02/11/2015

**IND301 Continued, page 4 of 4**

- IND301-7 Impacts on old growth forest are addressed in section 4.5.1.2. Impacts on federally-listed threatened and endangered species are discussed in section 4.7.
- IND301-8 The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

Cascadia Wildlands » Jordan Cove LNG Comments

Page 5 of 7

will save money by using thinner pipes, less welds, and a host of other cost-saving measures. If the pipeline blows up, fewer people die in rural areas. FERC should have considered if people lives are an acceptable trade for saving corporate profits.

This project will clearcut a 100' wide swath through wildlife habitat along 75 miles of public forests in southern Oregon, 80% of which had been reserved for imperiled wildlife. Over 400 waterways will have their stream-side vegetation permanently cleared. FERC failed to fully consider the impacts to our endangered wildlife that depend on these forests and streams, like the spotted owl, marbled murrelet, and coho salmon.

FERC should extend the comment period by at least 30 days to give everyone time to weigh in, and to be able to read the 5,000+ page DEIS. This project is too big to give so little time for public input.

IND301-7

IND301-8

20150211-0034 FERC PDF (Unofficial) 02/11/2015

02/06/15

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE, Room 1A  
Washington, DC 20426

**DOCKET NUMBERS CP-13-483-000 AND CP13-492-000  
COMMENTS ON THE DRAFT EIS FOR THE JORDAN COVE PROJECT**

Dear Secretary Bose and other concerned parties;

Please accept my comments on the Draft EIS for the Jordan Cove Project and add them to comments I have orally submitted on December 11-2014 at the Medford, Oregon hearing. I did not have time to finish the oral submission but submitted them as a handout on that date. They are included here for your information.(see attached)

**PURPOSE AND NEED FOR THE ACTION**

The Purpose and Need statement as defined in the EIS is too narrow. It was adopted by FERC having been defined by Jordan Cove which is the applicant and the major interested party. There was no discussion of the larger energy market and export capacity. A broader discussion is needed to determine if this action is really needed. Energy markets are fluctuating now and the need may change.

**Public Interest** "Under Section 3 of the NGA, the Commission considers as part of its decision to authorize natural gas facilities, all factors bearing on the public interest. Specifically, regarding whether to authorize natural gas facilities used for exportation, the Commission would authorize the proposal unless it finds the proposed facilities **would not be consistent with the public interest.**" (DEIS-pgs. 1-12-1-13)

Except for Coos County, it is questionable if this project is in the "public interest" of the people of the state of Oregon. The people of Southern Oregon will bear the brunt of the environmental damage with very few benefits except tax revenue received by the counties. The jobs created will be temporary and the environmental damage will be permanent. This pipeline is basically in the interest of a private Canadian company which will make large profits when it is completed and operating. I question the Public Interest for the people of Oregon of this project.

Need for the project is not being considered until later in the process. While it is understandable that the Commission will make the decision to authorize the project at a later time, the Need for this project should have been clearly defined in this document.

**OBJECTIVE**

The objectives of the companies were buried in the Alternatives Section (pg. 3.1) of the DEIS and were referred to in various other places in the document but nowhere could I find them clearly stated as a separate item. Objectives should be listed under this title as separate items. The DEIS should have a clearly stated Objective (or Objectives) for the project. They should be located following the Purpose and Need statement and before the Alternatives Section.

IND302

**IND302 Susan Delles, Rogue River, OR**

- IND302-1 Comment noted. The DEIS analyzes the environmental effects of the Proposed Action. It does not determine the need for the Project. The Commission will evaluate the need based on the FEIS and other analyses. See section 1.3.
- IND302-2 The Commission would determine public interest in its Project Order. Jobs are discussed in section 4.9 of this EIS.
- IND302-3 See response to IND3-4.
- IND302-4 Comment noted. Information will be added to section 1.3.

IND302-1

IND302-2

IND302-3

IND302-4

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#### ALTERNATIVES

A list of viable alternatives was not presented. Instead the only viable alternative was the project itself and the "No Action" alternative. The DEIS justifies a decision that has already been made to approve the project. A broad range of alternatives is required with complete analysis for each one. The range of alternatives should include those not within the jurisdiction of the lead agency. I am choosing the "No Action" alternative for the reasons stated below.

#### ISSUES OF CONCERN

##### A. LAND USE/AGENCY ISSUES (BLM/FS)-LMPs

1. **NWFP AMENDMENTS**-Environmental protections are included in the NWFP which is the current land use plan used by the BLM and FS. It includes environmental protections which have been approved by the courts. According to the DEIS, the NWFP and other legislative acts such as the CWA/ESA etc., will be amended to allow this project to take place. This could set a dangerous precedent for future actions that would make these laws much weaker and possibly lead to environmental destruction, the long term consequences of which would be felt for years to come. The federal agencies are held accountable for the care of Federal lands, and as such, should value the protection of them as a first priority. The fact that laws such as the CWA, ESA, FLPMA, NFMA, O&C act and NWFP(that incorporates these laws on federal lands) can be changed so casually to allow a foreign company to come in and make profits, shows that laws in the public interest have very little meaning. Regulations being waived include those protecting water, soil, riparian zones, endangered and sensitive species.

a. **Land exchanges** The positive outcome of the federal land exchange from Matrix to LSRs in areas that do not involve the project, depends on the type and location of the landscape. Even when LSRs are replaced, there will still be a loss of species (NSO/MAMU) that exist in the areas to be lost to the pipeline.

b. Allowing 10-15 years to meet visual requirements at various road crossings indicates it will probably never happen.

c. **Watershed Analysis**- The NWFP relies on Watershed Analysis as a strong foundation for the watershed descriptions and recommendations for management, "{The Watershed Analysis} will serve as the basis for developing project-specific proposals, and determining monitoring and restoration needs for a watershed..."(NWFP-E20) Therefore, the NWFP relies heavily on the information presented in these documents. However, many of these documents were written in the late 80s and 90s and, for those that have not been updated, much of the information presented in them is old. The recommendations for management are probably valid but many watershed conditions have changed drastically with regard to human impacts since the documents were written. While they are valid for historical information, all of these documents should be updated.

d. **Realignment of original pathway**- While the Pacific Connector is willing to change the pathway of the pipeline in accordance with agency requests, it will be helpful to have a final route which is confirmed. This must happen before the FEIS is completed.

IND302-5

IND302-6

IND302-7

2

#### IND302 Continued, page 2 of 26

IND302-5 Alternatives are discussed in chapter 2. The Oregon LNG project was identified as an alternative to the Project. It is being analyzed in a separate EIS, as stated in chapter 3.

IND302-6 All of the watershed analysis (WA) documents as well as the late-successional reserve assessments (LSRA) were reviewed and updated with any changed conditions to ensure that the recommendations in these documents were still valid (e.g. see page 1-17 to 1-18 in Appendix J for a description of WA documents reviewed and sections 2.2.1.1, 2.2.2.1, and 2.3.2.1 of Appendix H for a description of the LSRA documents reviewed in the DEIS).

IND302-7 While portions of the route can be finalized, generally the portions on federal land, much of the route is on private land and access has been denied for surveys. Until surveys are completed the route cannot be finalized.

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## 2. ACS OBJECTIVES/AMENDMENTS

a. Natural Range of Variability-Through broad interpretation, any action can be classified as being in the "Natural Range of Variability". The varied landscapes of the areas traversed by the pipeline have been shown to be subject to many changes which may or may not be positive. Pacific Connector is proposing huge changes to the landscape that will require amendments to change or overturn the ACS objectives or to change them in such a way that may not have been originally intended. The mitigation measures discussed for the various watersheds to meet ACS guidelines could have positive or negative effects depending on the measure involved. The answers for many questions raised, will only come after long term study of the consequences of these actions. If they turn out to be negative, there will be no way to go back and change the affects. When the ACS objectives can be so easily overturned what is the point of having them.

3. MITIGATION MEASURES mentioned in the document, while well meaning, can never replace what is being destroyed.

a. DEIS assumptions- There are assumptions in the document that these mitigation measures will have consequences that, in the long term, they may not have. An example of this is the assumption that replacing a Late Seral Forest with an Early Seral one will lead to another Mature Forest. Climate Change, Fire, and other factors could make this assumed scenario mute.

b. Stand Density and Fuels Reduction/Fuel Break- Fires, (stand replacement or mosaic) do not usually originate in LSOGs but in early and mid- seral plantations. There are many references in the DEIS to the need for building fuel breaks in LSOG forests. While building fuel breaks is advisable and preferred in early successional forests and plantations, it is not a good idea in LSOG forests because these forests (what is left of them) have created a fire resistant ecosystem that needs to be left alone. If the planned fuels reduction projects by BLM and FS are in LSOGs the fire resistance of those forests could be diminished. This will add to edge effect and further fragmentation that was discussed in the DEIS. The community of Trail Creek already has badly fragmented forests. It was not clear if the planned removal of trees in that watershed would be only in the pipeline corridor or on the edges of it or both. If this removal is truly to remove smaller material it is probably justified. However, commercial material being removed from outside the pipeline footprint would not be advisable. LSOG forests and the species that depend on them do best when left alone. This Fire Break is therefore not a mitigation measure for the destruction created by the pipeline footprint. The process of implementation of these projects would have a large influence on their success or failure. Southern Oregon has a proliferation of plantations and early successional forests that lead to fires. The little mature and late seral forests that remain should be protected.

The destruction of these LSOG forests is another reason not to build the pipeline which will be very little benefit to Oregonians except for temporary jobs created for a small number of people for a short period of time.

c. The DEIS has made clear that mitigation for BLM and FS lands is distinct from the normal NWFP projects.

d. Aquatic and Riparian Habitat Restoration -would not necessarily take place in the sub watershed as the pipeline crossing. This does not correct the problem that has been created by the pipeline crossing, even though creating habitat somewhere else may be an aid to the area in the new location.

IND302-8

IND302-9

IND302-10

IND302-11

3

## IND302 Continued, page 3 of 26

IND302-8 There is no proposal by the BLM or Forest Service to amend the ACS guidelines. An analysis of consistency with the ACS objectives is included in the DEIS in section 4.1.3.5 and in Appendix J. The compensatory mitigation plans have been designed to meet ACS objectives (see section 2.1.4, and Appendices F and J of the DEIS). The mitigation actions proposed have been tested and are known to be effective. These actions will also be monitored and the compensatory plans are designed to be "adaptive" so changes to the actions can be made if needed.

IND302-9 There are assumptions in the NWFP that early seral forests in the LSR system will mature to late-seral forests over time (along with assumptions that natural disturbances like fire and insect outbreaks will also occur) and there is nothing in the DEIS that changes those assumptions. Although there are some early seral forests in the matrix lands proposed for reallocation to the LSR system, these lands also contain considerable late successional forests. There would be approximately 10 acres of late-seral forests added to the LSR system for every acre of late seral forest that would be lost. So the mitigation is not relying on early seral forests maturing into late seral forests to maintain the amount of late seral habitat in the LSR system.

IND302-10 The 15 yr. monitoring report for the NWFP identified stand replacement fire as the single greatest factor for the loss of LSOG habitat on Federal land. The LSRAs for LSR 261 and 223 also recommended fuel reduction activities to reduce the risk of loss of LSOG habitat to stand replacement fire (see section 2.1.4, 4.1.3.6 and appendices F and H of the DEIS).

IND302-11 Mitigation has been designed watershed by watershed to compensate for impacts that would be caused by pipeline construction. Although some mitigation actions may not be in the same subwatershed, viewing mitigation at a watershed scale is consistent with the ACS guidelines (see section 4.1.3.5 and appendices F and J of the DEIS).

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e. LWD Instream/Culvert Replacement-While in-stream structures can be beneficial for overall stream health and complexity, the process and equipment needed to place them there may or may not be detrimental even in the long term. It was not clear if this would be done in the pipeline footprint or at other areas in the watershed or both places.

## B. ENVIRONMENTAL ISSUES

1. **WATER**-The pipeline would cross 400 bodies of water including; Coos Bay, The Coos, Coquille, Umpqua, Rogue and Klamath Rivers and hundreds of tributaries many of which include endangered Coho habitat. This is a definite threat to our fisheries which are an important part of the growing tourism industry in Oregon.

### a. Groundwater

**LING TERMINAL**-Construction will change this area into an expanded industrial site possibly affecting the ground water and the chance of hazardous chemical contamination. This will affect marine life in the Coos Bay estuary. It could cause permanent destruction of bottom habitat; shoreline erosion from ship wake; potential strikes or stranding to marine life from large vessels; and or introduction of invasive species from ballast water. Also, the removal of 38 acres of wetlands from dredging is a major concern as is the initial dredging required for ship passage. The mitigation wetlands being offered in another area is small and seems inadequate. The unique nature of this estuary and bay will not be replaced by creating wetlands somewhere else. These issues were discussed briefly in the DEIS but were dismissed due to proposed mitigation measures that were supposed to "fix it" after the fact.

**PIPELINE**-Due to the varied terrain that the pipeline will traverse, various aquifers and ground water deposits such as wells and springs could be affected. These were discussed in detail but little emphasis was placed on impacts to these systems. Loss of ground water during the construction of this project is a definite possibility as are hazardous material spills.

(1). Private Land Groundwater supplies, if affected, would receive a "temporary" supply of water from the company. If a permanent supply is needed the company would make the determination to supply this to the landowner. This leaves the landowner with very little legal compensation.

*"No long-term effects to groundwater are anticipated from construction or operation of the Pipeline and aboveground facilities because disturbances would be temporary, erosion controls would be implemented, natural ground contours would be returned as close to preconstruction conditions as possible, and the right-of-way revegetated. Implementation of Pacific Connector's ECRP and our Plan and Procedures would limit impacts from construction on groundwater resources. Our review indicates that potential effects to drinking water wells are unlikely and would be mitigated if they occur."* (DEIS-pg. 4-356) This type of statement is repeated throughout the document for various activities. It is guesswork regardless of the listed precautions. You cannot return natural contours to their original state. There is always a footprint.

(2) Hydrostatic Testing uses a lot of water-all water sources coming from the State, municipalities, and local water sources. We are currently experiencing drought conditions in this state and this water could be needed for other purposes. The discharge sites for this system were unclearly stated and could be another infringement on forest habitat.

## IND302 Continued, page 4 of 26

IND302-12 The short and long term effects of LWD placement are discussed in the DEIS and placements have been planned both inside and outside of the pipeline corridor (see section 2.1.4 of the DEIS).

IND302-13 Impacts on the Coos Bay estuary are addressed in section 4.4 of the EIS. Jordan Cove provided its most recent wetland mitigation plan in a filing with the FERC on February 17, 2015, and this plan would be reviewed by the Army Corps of Engineers (COE) as part of its permitting process under the CWA.

IND302-14 Potential impacts from pipeline construction on groundwater resources are discussed in section 4.4.1.2 of the EIS. Pacific Connector developed a Groundwater Supply Monitoring and Mitigation Plan. We have recommended that the plan be revised to identify all wells within 150 feet of the construction right-of-way, and outline measures to protect those wells, or mitigate impacts.

IND302-15 It is not guesswork. We have monitored many projects where topographic contours were reestablished.

IND302-16 We disagree. The EIS clearly identifies the hydrostatic test water discharge locations (see table D3 in appendix D).



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**b. Surface Water-**

Water quality limited streams predominate on the entire pipeline route where stream crossings are to take place. No amount of permits or BMPs can change or minimize this problem to actually make a difference where Riparian vegetation is removed and sediment is added. Table 4.4.22-3 speaks for itself. It is impossible to do this project without severe effects to bodies of water where the pipeline crosses. Drinking water sources and points of diversion will be impacted.

(1) **Riparian Reserves**-Statements like this are repeated throughout this section of the document: "because of the linear characteristic of the pipeline, the Riparian Reserve crossings would be spread out across the landscape and would be discontinuous" The loss of small amounts of Riparian zones for each stream crossing add up to a total effect on the landscape even though they are disconnected. The importance of Riparian Reserves for individual streams is stressed throughout the ACS objectives of the NWFP. Riparian Reserves given in percentages are meaningless. The condition in terms of soils and streams in the various locations of the project can have the most impact.

(2) **Endangered/S&M species**-Waiving protection for these seems to be routine by the Agencies. These species cannot be rerouted like the pipeline and the attempt to create habitat elsewhere while admirable, is experimental and may or may not work. There will be considerable take for these species. Many areas along the route in surface water streams are prime Coho habitat.

(3) **Wetlands**- most important is the Coos Bay Estuary  
High quality wetlands were not clearly defined

**A Few Areas of Concern:**

**Coos Bay Terminal/Estuary**- This is an extremely complex system that could go wrong in many areas including dredging to disposal of storm water and chemical runoff. Numerous plans exist to mitigate and modify any problems with the construction and maintenance of this system. However, many things could still go wrong. Even though the bay is "water quality limited", a complex system of marine life exists in a unique estuary environment. This is classified as a high quality wetland. Ballast water could introduce invasive species into the bay. This plan changes the current environment into a permanent high level industrial zone that is required by a major port. It will never return to an environmental sustainable state. It is also located on an earthquake subduction zone making the potential for a tsunami a distinct possibility.

**Haynes Inlet**- use of open cut trenching could create problems. The fact that the crossing would only take a few weeks ignores the point that many species could be lost during this time period.

**Coquille River Watershed (all forks)**-Loss of Riparian Reserves

**Myrtle Creek Watershed**-landslides/erodible soils/road density

**Days Creek/South Umpqua Watershed**-limited connectivity to aquatic systems/road density contributes to sediment which is the most limiting factor in the watershed/extensive fuels reduction adjacent to the pipeline is mid seral and could aid in reducing fire risk

**Upper Cow Creek Watershed**/isolated forest wetlands could have impacts on water tables/drought conditions persist at the present time/Mobilized sediments containing Mercury from abandoned mines could cause risk/stream shade could be a concern/LSR fuels reduction in the form of density management could create a fire risk in OG forests but is necessary in younger stands/under burn could be beneficial/soils are highly erodible.

IND302-17

IND302-18

IND302-19

IND302-20

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IND302-17 We disagree; effects on waterbodies crossed by the pipeline would not be severe. As the EIS clearly demonstrates, impacts on waterbodies would be temporary and short-term. You have not presented any data to support your claim that water sources or points of diversion would be adversely affected.

IND302-18 Project-related effects on Riparian Reserves would be minor within the context of watersheds crossed. The federal land managing agencies assessed if the Project would impact ACS objectives.

IND302-19 Wetlands are discussed in section 4.4.3. See the recommendation requiring Jordan Cove to complete consultations with ODSL, ODEQ, and COE and file a final mitigation plan and for Pacific Connector to file additional information on how it classified high quality wetlands

IND302-20 An open cut would add to turbidity; however, the pipeline construction would be in the fall and winter when turbidity is normally at its highest. Fish and other aquatic organisms in the bay are adapted to these high levels of turbidity in the winter. Additionally see response to CO39-49, 51, 53 and 54.

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**The following watersheds would be most critically impacted**

**Trail Creek**-This is a compromised landscape. The main stem of Trail Creek is scoured to bedrock and the landscape has been heavily logged on highly erosive soils in the past. Structural complexity has been greatly reduced. The area has a very high road density which has negatively affected aquatic habitats. However, Coho still have high spawning rates in the watershed, especially in the main stem where summertime temperatures in some reaches are high. Water quality and temperature are issues in this watershed. I was disappointed to learn that so much of the pipeline will go through this watershed-even though not through the main stem. In 2002 a checklist for a BLM timber sale project documented the Environmental Baseline. According to most criteria for healthy streams and fisheries, most were "Not Properly Functioning or At Risk" with the possibility of maintaining the condition. Trail Creek WA states, "*The dominant disturbance factors affecting aquatic habitat quality in the Trail Creek watershed have been land development, timber harvest activity and road building. These activities had had direct effects on vegetation, hydrologic change, and erosion processes...*"*"In return these processes have affected the following key aquatic quality components: stream sedimentation, stream shade, large woody debris and stream channel conditions."*

This pipeline could be the finishing touch on destroying this watershed as a functional entity.

**Clay Soils**-The mitigation measures listed for clay soils are subsoil ripping listed in the document. This method does not always work as the wet clay forms a cement type substance. Adding biosolids and other organic materials may help but the process does not always work as planned. This is true of clay soils in general-and not specific to this watershed.

**Fuel Breaks** in LSOG forests will increase the risk of fire-not reduce it. The moisture retained in that environment slows down the spread of fire. In mid seral and plantations thinning is very important.

**Road Decommissioning** can be a benefit if done properly. However, the footprint from the decommissioned road will remain. This is better than not doing it at all but there will still be evidence of a road.

**Shady Cove/Rogue River**/This is another compromised watershed with highly erosive soils. Even with the rerouting of the pipeline, this is a sensitive watershed with impacts on stream banks and substrates. The effects of clearing not only depend on number of acres cleared, but the substrates, and soils, and the stream channel being crossed. Again the large areas of fuel breaks outside the project footprint in LSOG areas will make the area more prone to fire.

**Big Butte Creek**-Realignment of the pipeline to a ridgetop is a good idea. Will a new road be required to move the pipeline to the new location?

IND302-21 Comment noted.

IND302-22 No, the proposed minor realignment in response to BLM's request at approximately MP 131.5 would not require a new road. See Pacific Connector's filed alignment sheets from January 20, 2015 (FERC Accession No. 20150120-5154).

IND302-21

IND302-22

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**Little Butte Creek** –As planned, the pipeline will have extensive impacts on this watershed. Little Butte Creek is a Tier One Key watershed, with a water quality limited stream that has sediment problems. Pacific Connector has modified the project to conform to ACS Objectives but the DEIS did not say how. The fact that the pipeline will be buried does not make up for the fact that the Riparian areas will be cut with long term changes in vegetation and stream sediment which could compromise fish. Decommissioning roads is a good idea but will still leave a footprint. All proposed amendments seem to be to allow the plan to go forward in spite of probable environmental impacts. It would be helpful to know the condition and the quality of the landscape being added to the LSR classification.

IND302-23

**Spencer Creek**- This is a dry watershed on the east side of the Cascades with a high road density. The project would require removal of Critical Habitat for NSO. Cutting more trees in OG habitat is not advisable. This is not an improvement. The pipeline should be moved to stay out of this habitat unless it is the part located next to Clover Creek Rd.

IND302-24

**Rogue River Crossing**- Drilling under a major river such as this, especially in an area where Coho predominate, could present many problems even if everything goes well. If this process fails, we could lose the fishery. This is a part of the plan that should never be approved. The pipeline should be rerouted to avoid critical Coho spawning habitat.

**Jordan Cove/Coos Bay/Haynes Inlet**-addressed in other parts of this paper.

## 2. FORESTRY LSR-LAND USE CLASSIFICATION-NWFP

### LSOG Forests/Pipeline

This is an important classification that aids in protecting endangered and S/M species and forests with OG characteristics. Since LSOG forests have been mostly decimated in the last 60 years, it is disappointing to see that so much of this type of landscape will be lost due to this project. The pipeline will cross about 858 acres of LSOG and 854 acres of mid-seral forest. The impacts of areas cleared outside the central footprint increases its actual size. This includes fire breaks, roads, maintenance facilities, UCSAs, TEWAs and hydrostatic discharge sites. The potential fire danger from the on-site storage areas could be catastrophic. Regardless of mitigation measures, the landscape will permanently be changed.

**Land Exchanges** (see also pg. 2 –land exchanges) Trading of something called Matrix for something called LSR is dependent on many factors.

1. What type of Matrix landscape is being exchanged? What are the characteristics of that landscape? Are they comparable? Many landscapes that are now classified as LSR do not have the characteristics of an old growth forest.
2. What type of species are present in these newly traded landscapes? Are they the typical LSR species?
3. What is the configuration of the surrounding landscape? Is it compatible with the LSR that has been traded?
4. Surveys should have been done on the species present in these landscapes? This information should be available through the agencies.

IND302-25

7

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IND302-23 Impacts to riparian reserves and consistency with the ACS guidelines, including proposed compensatory mitigation, are discussed in section 4.1.3.5 and Appendices F and J of the DEIS. The condition of the proposed matrix lands being proposed for reallocation including the location and amount of LSOG habitat is discussed in section 4.1.3.6 and Appendix H of the DEIS.

IND302-24 Pipeline locations considered affects to many resources and route adjustments and designs have been modified to reduce impacts to key resources. Potential effects to the resources based on the current alignment was evaluated including section 4.6.2.3 for stream crossings. Potential for problems with drilling under streams are low and detailed contingency plans are in place should there be any problems which include agency engagement should issues arise (Drilling Fluid Contingency Plan for Horizontal Directional Drilling Operations). As stated in section 4.4.2.2, all stream crossings would be conducted during low flow periods and in accordance with state permits.

IND302-25 The condition of the proposed matrix lands being proposed for reallocation, including the location and amount of LSOG habitat, is discussed in section 4.1.3.6 and Appendix H of the DEIS. The lands being proposed for reallocation are adjacent to or in the vicinity of the LSR lands that would be impacted by the pipeline and are expected to provide habitat for the same species found in the LSRs affected by the pipeline corridor. The lands proposed for reallocation are comparable and have been identified by agency biologists familiar with these landscapes. There would be no change to the designation of Tier 1 Key Watersheds as a result of the PCGP project. The amount of "incidental take" associated with each listed species from the construction of the pipeline will be determined by the USFWS and NOAA Fisheries in their Biological Opinions. There would be no "incidental take" associated with the land reallocations since habitat would not be affected and would be put in a reserve allocation.

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5. Many of the landscapes being traversed by the pipeline are Tier 1 Key Watersheds. How many of these will change?  
6. How many endangered and late successional species will be in the "Take" category due to these changes? How many new late successional (including endangered species) will take their place?

**Edge Impacts/Fragmentation**-There is no way to mitigate for this. The breaking up of these forests into small isolated patches will definitely have an effect on the species that are dependent on a large contiguous landscape. Indirect and direct effects will be maximal. The additional fuel breaks outside the project footprint will add to the problem. Depending on the landscape that is being worked with, more long term late successional forest is not produced by cutting more forest or creating fuel breaks. These could turn into brush fields that will indeed be fire prone. *LSRs were part of the NWFP to preserve these forests and species; therefore: Developments of new facilities that may adversely affect Late-Successional Reserves should not be permitted New development proposals that address public needs or provide significant public benefits such as power lines, pipelines, reservoirs, recreation sites, or other public works projects be reviewed on a case-by-case basis and may be approved when adverse impacts can be minimized a mitigated. These will be planned to have the least possible adverse impacts on Late-Successional Reserves. Developments will be located to avoid degradation of habitat and adverse impacts on identified late-successional species (FS/BIM/ 1994b: C-17 (See Public Interest under Purpose and Need-pg1).*

The extensive cutting and alteration of Forest habitat will change permanently the character of the landscape-not just the pipeline footprint but the fire break, storage areas, roads that will fragment the forest permanently. Replanting part of the footprint with early successional material will not correct the situation and could add to the potential for fire risk. *Pg4-468-DEIS"- Although any habitat type can be fragmented, of the habitat types crossed by the pipeline, forested habitats are the most sensitive to fragmentation."*

**Jordan Cove**-90 acres of forest habitat will be cleared to make way for this project. This will permanently change this ecosystem and will threaten the remaining marine and terrestrial wildlife. In spite of what the DEIS says, they cannot be considered temporary. Noxious weeds present in the area could very well take over and would have to be treated on a continuous basis. It is questionable if native species could reestablish themselves.

#### Coastal Tree Diseases

**Port Orford cedar**-The root disease that sometimes infects these trees means that they are better left alone. A disturbed landscape contributes to problems because it often comes from infected stumps in areas that have been logged.

IND302-25  
continued

IND302-26

IND302-27

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IND302-26 Edge effects are discussed in section 4.6.1.2. As the DEIS notes, the adverse effect tends to decline over time as young trees grow along the edge (page 4-541). There is no on-site mitigation for the fragmentation and edge effect that would be created by the maintenance of the 30 foot wide low vegetation portion of the pipeline corridor. These effects would remain for the life of the pipeline. The BLM and Forest Service however have proposed off-site mitigations such as road decommissioning that would offset some of these impacts (see DEIS pages 4-206 to 4-208 for a discussion of this mitigation as it relates to reducing effects of edge and fragmentation). There is no proposal by the BLM or Forest Service to exempt the proposed PCGP project from direction in the NWFP at C-17 for new developments in LSR. The mitigation actions proposed by the BLM and Forest Service have been designed so that overall the impact would be neutral or beneficial to the creation and maintenance of LSOG habitat within LSRs (see DEIS section 2.1.4, 4.1.3.6, 4.1.3.7, and Appendices F and H).

IND302-27 Only 67 acres (not 90 acres) of forest would be cleared from the Jordan Cove terminal. This would be a permanent impact. However, taken within the context of watershed scale this would not be considered a large habitat loss. It would not change the ecosystem. Jordan Cove would compensate for the loss of forest by acquiring a total 102 acres of coastal dune forest at three off-site locations for preservation. The LNG terminal would mostly be built on industrial or open lands. Measures to prevent noxious weed infestations, or to treat an infestation if one already exists or developments, are included in section 4.5.1.1 for the terminal area.

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**Mitigation Measures-forests**

**1. 1000 Acre Fuel Break-** There are other references that point out that it has been shown that fire does not devastate OG forests the way it affects plantations and mid and early successional forests. OG forests are moist and fire resistant and fire will under-burn large tree canopies. Depending on the landscape and the forest ecosystem, the planned additional cutting for this fuel break will make these forests more fire prone not less. The type of forest impacted should determine if it would be best to leave as much of the late successional habitat outside of the pipeline footprint as possible. This fuel break could also soften the edge effect between the pipeline footprint and the other part of the forest if it is LSOG. However, the effect on the forest as a whole will probably lead to a permanently altered condition.  
The storage areas will contribute much more to fire regimes than OG canopies.  
**2. Integrated Stand Management-** In areas of mid to early successional forests and in plantations, this can have a beneficial effect.  
**3. Meadow Restoration-** The creation of this does not make up for loss of forest habitat from the direct impacts of the pipeline. This is not a mitigation measure for this loss /  
**4. Ground Based Yarding-** Ground based yarding is generally detrimental to soils and should be discouraged. The mitigation plan, as discussed in the DEIS, is the best I have seen. However, whether the plan, as outlined is achievable is questionable. It is best to avoid ground based yarding especially in areas with compactable or erodible soils.

IND302-28

**3. ENDANGERED SPECIES/HABITAT**

**a. Terrestrial/Riparian Resources**

**The timeline** for Forest cutting and pipeline construction in the spring, for most species will decimate those species for several generations. The influence of the pipeline on all species will be felt miles from where the pipeline is actually built. The document did not seem to take this into account but downplayed this influence by saying that the narrow linear construction will be confined to that area and into the edge. I think that the width of the edge, though discussed, was underestimated. It might be better to change the schedule so that all cutting occurs in the fall and winter-not just for NSO and MAMU. This will affect all the species from bats to mammals and birds because springtime is when nesting and denning activities take place. The construction and forest cutting schedule should be changed with this in mind.

IND302-29

**Noise-** This will be a constant presence once the project begins. The result will be loss of the next generation of species that remain behind. This again speaks for changing the activity periods to a different season.

**LSRs/Riparian Reserves-** Impacts will be long term and “not be able to be mitigated” Assume that these landscapes will be permanently changed. Snag density is assumed to decline even though there is a plan to create more from live trees. This is probably not a good idea.

IND302-30

**b. Bird Species**

The loss of all bird species is huge and an unacceptable loss.

**Neotropical birds** are of special concern because their habitat is being impacted in many venues-not just Southern Oregon.

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IND302-28 Comment noted.

IND302-29 In the context of watershed scale, the clearing of vegetation along the pipeline route would not significant. It would not decimate species for generations. However, the clearing of forest would be a long-term impact, as it would take time for trees to grow back within the revegetated work areas. It would be difficult to clear vegetation in the fall or winter, due to heavy rains and snow. Impacts on wildlife species are discussed in section 4.6 of the EIS. Edge effects are addressed in section 4.6.1.2

IND302-30 Impacts to LSRs and Riparian Reserves are addressed in the DEIS (see sections 4.1.3.5 and 4.1.3.6 of the DEIS). Mitigation actions including creating additional snags in LSRs and Riparian Reserves is included in the compensatory mitigation plans (see section 2.1.4 of the DEIS).

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**Migratory sea and coastal birds** are facing the same constraints and will be further impacted by the destruction of various types of landscapes at Jordan Cove.

**c. Raptors-** Surveys should have been completed and nest sites documented along the pipeline route. It is important to verify this. The recommended buffer spacing is better than nothing but, considering the broad landscape of influence, might not help much.

**d. Communication Towers-** Three new towers will spread the pipeline influence further over the landscape

**e. NSO/MAMU** will be discussed in another part of this paper.

**f. Bats-** The least that should be done is that surveys should be conducted to find out which bats actually occupy trees in the project area. It is important to keep bat populations healthy and lose as few as possible because of their importance for insect control. It does not seem that anything can be done to protect populations that are in these areas because the life cycles of these species will contribute to losses any time of the year.

**g. Large Mammals-** Elk are sensitive to human disturbance and will be stressed during the winter. However, they are known to survive with human influence more than other species. The amount of new forage created could balance loss of habitat. Spring clearing could affect new generations.

According to the DEIS, Elk winter range would be protected in the winter except in the Klamath where Pacific Connector has applied for a waiver.

**h. Amphibians/Reptiles/Small Mammals**

OG species that need darkness and moisture and stability will be most affected by this project. Also affected are those dependent on water bodies and riparian areas. Because of the edge effect and permanent changes, they will have nowhere to go that they can reach in a place where they can survive. Completion of the project will take years and these changes will not be suitable for some species. These individuals will not be expected to return to a changed ecosystem. Mobility in this type of wildlife has its limits especially if there is no suitable ecosystem for them to move to. *"Less mobile wildlife species that are not able to move away from construction activities during clearing and site preparation could experience direct mortality."*

Proposed Mitigation Measures as stated in the DEIS always underestimate the impacts that the project is likely to have.

1. They include replacement lands that can be used instead of the ones being used by wildlife currently. These measures will involve loss of most of the wildlife and birds that currently use the area. The new protected areas will involve new individuals. While some populations will not be affected by loss of large numbers, others will be severely diminished because their populations are already in decline. Again, the assumption is that only the lands directly affected by the construction will be involved. The sphere of influence for loss will be much greater.

2 The Jordan Cove and Coos Bay estuary is a very sensitive ecosystem that has adapted to a certain amount of industrialization. As the site becomes more industrialized, there is also the probability of chemical spills and gas leaks and general pollution. This must have a negative effect on the wildlife that is part of that ecosystem. The assumption that LNG vessel marine traffic would not cause significant damage to birds has not taken into account most possibilities of accidents waiting to happen. Again this situation was underestimated by the DEIS.

3. Invasive Species and use of herbicides- Introduction of new industry will bring a new invasion of nuisance species, sometimes demanding the use of herbicides. These chemicals,

IND302-31

IND302-32

IND302-33

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- IND302-31 USFWS is responsible for enforcing the Migratory Bird Treaty Act. They have been consulted on impacts to migratory birds, including raptors. See the Migratory Bird Conservation Plan completed in consultation with the Service. Potential impacts to raptors are described in section 4.6.1.2 of the FEIS.
- IND302-32 Methods for determining bat presence within the project area are described in section 4.6.1.2, along with a discussion of impacts to bats.
- IND302-33 We disagree. Mobil species would relocate to nearby similar habitats during project construction. We believe the acquisition of replacement habitat would benefit wildlife. As mentioned in section 4.4.1.1, Jordan Cove has developed a Spill Plan and Spill Prevention, Containment, and Countermeasures Plan that would protect the Coos Bay estuary and wildlife from adverse impacts and contain chemical and fuel spills. It is highly unlikely that LNG vessel traffic in the waterway would have adverse impacts on birds.

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especially if not applied properly, can have a long lasting effect on plants and animals, especially fish. While it is important to get rid of invasive species, it is also wise to consider that these chemicals are a pervasive part of our current ecosystem with effects that are not always benign. It is also important to consider the animals that will be using the area when construction is completed. Invasive Insects can be an increasing problem. **BMPs** to avoid the potential spread of aquatic invasive species and pathogens of concern are encouraged if done promptly and thoroughly.

4. Trying to police an area the length of the pipeline will be difficult with limited resources such as the agencies and counties have. There will be abuses to the land from OHVs and other human activities that could lead to increased fire risk and continued stream pollution.

5. Permits for a number plans such as the "Migratory Bird Conservation Plan" have not yet been filed with appropriate agencies and government officials. Will these come rushing in at the last minute to perhaps not receive the attention they deserve? These plans and permits need to be finalized prior to the final DEIS release.

6. On pg. 4-515 the statement concerning the Subtask Working Group to develop habitat categorizations for the Project in 2007-2008. "*Pacific Connector applied the same categorization process outlines in the ODFW Fish and Wildlife Habitat Mitigation Policy to both federal and non-federal lands. In 2009 the ODFW accepted these habitat characterizations with some revisions*". Those revisions were not discussed in this document so it is hard to know if they were adopted. Does Table 4.8.1.2-4 reflect those revisions?

7. Pg. 4-519-520- Table 4.8.1.2-6 is incomplete and says very little. It should be redone.

8. It was not clear if Table 4.8.1.2-7 refers to all individual birds or all species. If it refers to species, the loss of individual birds would be much greater.

#### AQUATIC RESOURCES JORDAN COVE

##### Coos Bay/LNG Terminal/Ships

This estuary is a unique ecosystem of mixing salt and fresh water. The organisms that live here are those that use this unusual type of environment. Algae and Eelgrass create an important habitat for many species to thrive.

##### SPECIES INCLUDE

Marine Fish/Migratory/ground fish and pelagic  
Anadromous Fish/some "At Risk"  
Shell Fish (benthic and epibenthic invertebrates)  
Marine Mammals  
Sea Turtles

Many of these species are federally protected.

LNG vessels could pose a threat to many of these aquatic species because the size of the vessel and the changes required for these ships to enter this ecosystem may not guarantee their survival. Briefly some problems include:

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IND302-34 The applicants filed their Migratory Bird Conservation Plans on February 13, 2015.

IND302-35 Those revisions were adopted, and are reflected in Table 4.8.1.2-4. The only requested categorization revision was to not consider mature oak woodlands to be Category 1. See personal communication with R. Owens on Feb. 15, 2009 in Appendix 3F to PCGPs RR3.

IND302-36 Redoing the table on 4-519 would not change the fact that the information on local populations of these species between 1992 and 2011 is not available. The DEIS does not contain a table 4.8.1.2-6. We checked to see if the comment meant to refer to 4.6.1.2-6, which does pertain to bird species, but this does not appear to be the table either. If it meant to refer to table 4.6.1.2-7, then the response is that the table estimated the number of individual nesting bird pairs, not to species.

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Dredging/Maintenance Dredging-The huge amount of material that will have to be removed to make room for these vessels and the continuous process of dredging over the years will change this ecosystem even though dredging has taken place in the past. The effects of this new process will take impacts to a new level.

LNG Spills-could happen and a fire could result even though this is unlikely

Fuel/Oil Spills-could and probably will happen

Introduction of Invasive Species through Ballast and other contamination sources

Fish stranding

Waves/Propeller Wash-If only a few ships were entering and leaving the bay this would not be much of a problem. However, with the heavy traffic, the loss of resident (especially benthic) species and possible shoreline erosion could be considerable.

Entrainment and Impingement from Vessel Cooling Water Intake-this will release warm water into the bay, impacting the temperature. It will also destroy many important smaller organisms that are part of the food chain, because the screens to block the intake of these organisms do not meet NMFS criteria. Ships containing non-approved screens should be required to meet the NMFS criteria. Many of the affected organisms are in the juvenile stages that are needed for the next generation. Most of the loss occurs in common species but the affects could increase over time because there will be numerous vessels and this will be a continuous process. The rating of "no adverse effect" is a large assumption.

Storm Water Runoff-Terminal-All storm water Runoff should be disposed of in the sumps because the full content of that water could be unknown.

Lighting/Acoustic Effects are expected to be minimal. However, considering the whole of all other impacts they will add to it.

#### ESSENTIAL FISH HABITAT

1. NMFS has not yet finished consulting and giving its EFH or Biological Opinion. It was unclear when that was expected. FERC is supposed to be consolidating this process but it was not clear what stage that the procedural process is in.

#### 2. Food Web- Jordan Cove-

Dredging and construction could change water chemistry and add turbidity as well as disrupt the delicate balance of this ecosystem so it will be permanently changed. Small invertebrate organisms so important in the food chain could be lost. Please consider carefully, the far reaching impacts this project will have, especially when tracts of forested landscape are eliminated. Mitigation measures, although well meaning, are not adequate. Again, assumptions of positive nature do not take into consideration all that could happen.

#### 3. Haynes Inlet-

The two to three week construction period for the pipeline (maybe longer) will have considerable impacts on the species that use this area.

a. Olympia oysters along the crossing of Haynes Inlet would be directly affected by construction activities. There is a mitigation plan for this that involves moving the Oysters but questions still remain unanswered. How will the Oysters survive the process of being moved several times? If this plan does not work out, it was unclear who would be responsible. Again, the assumption is "no significant impact" This could affect other benthic organisms as well.

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IND302-37 Comment noted. See section 4.4.2.1.

IND302-38 NMFS is not a cooperating agency on this Project. They are an intervener. In a letter dated March 24, 2015, the NMFS provided comments on the FERC's February 24, 2015 BA. Both the FWS and NMFS will issue their BOs following completion of the FEIS.

IND302-39 Information on dredging and disposal of dredged material is found in 2.1.1.12. As noted in 2.1.1.2, the Port has already obtained an easement for the channel for maintenance and operation. The channel has been dredged for decades. The effects from dredging for this project are addressed in section 4.4.2.1.

IND302-40 Olympia oysters are discussed in section 4.6.2.1. The DEIS acknowledges that the Project may adversely affect oysters in the bay. The pipeline effects and mitigation are discussed in section 4.6.2.3.



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b. Turbidity-Turbidity will affect not only Salmonids but the variety of marine life, vertebrates and invertebrates. The fact that construction will take place over a 2-3 week period is an issue of concern. The DEIS seems to consider this a short time period. The fact that the Eelgrass, that is vital to so many species, could regroup after disturbance is a matter of conjecture.

IND302-41

c. Contingency plans to consult with the agencies in 5 years if mitigation plans do not work would be after the construction is complete and the ecosystem might be permanently changed. The organisms that depend on these plants and the rest of the food chain in the bay might be irrevocably changed by then.

IND302-42

#### PACIFIC CONNECTOR PIPELINE

1. The pipeline will cross 2.5 miles of Coos Bay the ecosystem of which has been discussed above.

2. Aquatic Habitat in Inland Waterways. (See earlier discussion under Land Use-Water)

These are cold water streams with Riparian Areas that are heavily forested. Most are small streams but 5 major rivers will also be impacted. Resident cold water fish (trout) and Anadromous Fish are part of these ecosystems. Some of the species affected are listed as "at risk". Two are ESA listed (Lost River and Shortnose Sucker). ODFW evaluations are from 2005(ESA listed species not included). It would be interesting to have updated information from ODFW about fish.

IND302-43

3. Construction Across Inland Stream Habitats

The long term degradation of these habitats is a distinct possibility because it could change the channel over a long period of time thus altering the stream character and function so that some fish species would no longer survive in that environment. The changes to the Riparian areas would take years to recover, even with replanting.

a. Construction Timing-In drought years many of these streams dry up and fish survive in pools of water until the fall and winter rains occur. The time period between July 1 to mid-September is a time in dry years, when many streams are dry. This should be a good time to do construction except that fish surviving in pools are highly stressed and the construction could affect them. This should be considered on a case by case basis.

#### Possible Considerations for these plans

1. Sediment and turbidity-addressed earlier-could be a problem for fish and aquatic organisms trying to survive in drought conditions.

2. Water Quality Limited Streams with high TMDL ratings are becoming more common in Southern Oregon. Pipeline crossings should not go through TMDL, 303(d), or water quality limited streams.

3. As addressed earlier, drilling under major rivers could present multiple problems many of which are discussed in the literature-i.e. frac-out. All processes for major stream crossings are questionable at best and could prove disastrous for aquatic life if they do not work as planned. There was a discussion on pg. 4-606 about the effect of a frac-out on spawning eggs and redds. This process should never be done during spawning season. It should be treated like other methods of stream crossings.

IND302-44

13

## IND302 Continued, page 13 of 26

IND302-41 Turbidity caused by construction of the pipeline across Haynes Inlet would have temporary and short-term impacts on aquatic resources, as discussed in section 4.4.2.2 and 4.6.2.3.

IND302-42 The applicant will supply annual reports following planting, which would occur the spring and summer after construction, on status. The plan notes that actual contingency measures will be based on monitoring data and site circumstances as they occur. Additionally state and other federal permits will specify any changes needed in the current plan to meet acceptable environmental mitigation needs.

IND302-43 The State of Oregon has not released a new evaluation since 2005.

IND302-44 HDDs have been successfully completed under many rivers for many other projects. The use of an HDD would avoid impacts on a river and its related aquatic habitat. In the unlikely event of a frac-out, Pacific Connector developed a plan that would protect fish.

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4. Stream banks subject to erosion due to unstable soils and other factors, should be treated like water quality limited streams. According to the literature pg. 4-607 119 stream crossings are in this category.

IND302-45

5. Two new Temporary Roads will be constructed that cross fish-bearing streams. The methods and locations have not been fully characterized-The road density of many of these watersheds is in many cases, extreme. It is currently one of the main causes of sediment in streams. Many of the roads involving the project are called temporary roads. Would they be decommissioned when the project was finished or allowed to remain as maintenance corridors?

IND302-46

6. Stream Crossing plans to be filed with the Secretary- Many new plans that are requested have not yet been filed. This is important and should be closely monitored and adhered to. The time has arrived for these plans to be filed.

IND302-47

7. Elevated Mercury levels from mining waste have been a problem in various watersheds and rivers in Southern Oregon. The Cow Creek example could be multiplied and should receive further attention. To assume that "overall adverse effects to fish from Mercury would not occur with this project" is an assumption that requires closer scrutiny.

IND302-48

8. Vegetation Removal- cutting in Riparian Reserves on and off federal lands has been addressed. This could be one of the biggest threats to the fisheries due to temperature increase. In spite of the Mitigation Measures, this habitat will take years to recover. It could split the stream and result in impeded fish passage. This could change streams from well shaded cold temperature to match those that exist in areas of grazing or other areas of human intervention. Drought flow conditions (2013) could be the new normal with climate change making our winters drier and warmer with less accumulation of snow pack and our summers hotter with more fires. This is not a good time to be removing vegetation from stream banks. Do not assume small changes from these actions.

IND302-49

9. LWD- Placing LWD in streams is a good idea. Where would the wood come from? Would further clearing be required in the stream to supply this?

IND302-50

10. Hydrostatic Testing-This uses a lot of water during drought conditions. See pg. 4 for further comment

11. Summary- Pg. 4-621-In freshwater, EFH for Chinook and Coho salmon includes habitats for spawning, rearing, and migration corridors (PRMC 2003). Components of the pipeline with the potential to adversely affect designated EFH include removal of terrestrial and riparian vegetation, in-water pipeline construction increasing turbidity and sediment, accidental spills and leaks of hazardous materials, and hydrostatic testing. Construction adjacent to EFH could also result in increased storm water runoff and/or an inadvertent spill of hazardous materials, wither of which could result in substantial adverse effects on EFH. This is a complex project where many incidents could occur that would be problematic. The mitigation measures, while well intended cannot possibly cover all probabilities.

IND302-51

14

## IND302 Continued, page 14 of 26

IND302-45 Pacific Connector would implement measures during construction across streams that would reduce the potential for erosion along stream banks, as discussed in section 4.4.2.2.

IND302-46 Temporary roads would, as stated in section 4.10.2.1, be removed and the land restored following use.

IND302-47 On February 13, 2015, Pacific Connector filed its latest analysis to meet FWS guidance regarding stream channel risk (see GeoEngineers PCGP Stream Crossing Risk Analysis Addendum 2015).

IND302-48 See response to IND2-8.

IND302-49 The effects of clearing vegetation for stream crossings, including effects on temperature, are discussed in section 4.6.2.3.

IND302-50 The wood would come from clearing the right-of-way and new roads, as well as other on-going forest management activities.

IND302-51 The DEIS does not state that the mitigation measures "cover all probabilities". The DEIS discloses the risks in Chapter 4 and identifies appropriate mitigation. Impacts on EFH are discussed in section 4.6.2.

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## 12. Mitigation Measures

The most important of these pg. 4-625 are:

a. *Acquire conservation easements on private land to protect, or improve important riparian habitats, particularly targeting streams containing listed fish, 303(d) streams, and key watersheds. This may be difficult since people are generally unhappy with this project especially if it goes through their property. It was not clear if this would be people who are directly affected or the general rural land owners in the area.*

b. *"Decommission roads and waterbody features (e.g. culverts, crossings, bridges) identified by the BLM and Forest Service that are no longer needed for resource management to provide numerous benefits including lower road density, minimization of channel extensions, minimization of sedimentation, improvement of fish passage through culvert removal and reduction of riparian habitat fragmentation" (the last would be a long term project).*

c. *Most Important- "Close roads that are not in use, which would reduce sediment runoff to streams; and stormproof roads (such as adding water bars, ditch cleaning, culvert bypass) to also reduce fine sediment to streams and reduce the risk of road blow out, which could contribute heavy sediment loads to streams."*

d. *OHV traffic will also be a new problem that will have to be dealt with. It is prevalent in all watersheds.*

## THREATENED, ENDANGERED, AND OTHER SPECIAL STATUS SPECIES

Since many of these will be lost I will just list the ones that the project is **"Likely to Adversely Affect"**. The changes to this ecosystem will have a devastating effect on fish and wildlife in spite of the planned mitigation measures.

### Federally Listed Mammals/Birds

**Fisher**-This was a "not likely to adversely affect". However, cutting in OGLS forests in the springtime could disrupt denning affecting the next generation.

**Marbled Murrelet**- "likely to adversely affect" because of habitat being taken by the pipeline both indirect and direct impacts are likely. The amendments being proposed by the BLM will insure that these bird populations are diminished when they are already in trouble.

**NSO**- "likely to adversely affect" In spite of federal protection, this species is in decline.

1. Offsite thinning is not likely to enhance this bird's survival because they need a closed canopy. Juveniles take about 2 years before they can fledge. This leaves the species even more vulnerable. Killing Barred Owls is not likely to enhance the NSO because they live in the Edge areas where NSO is vulnerable. The removal of so much nesting habitat will make the species less likely to survive. Fire could certainly have an effect on this species but the real problem has been logging, roads and human encroachment into habitat areas.

IND302-52

IND302-53

IND302-54

## IND302 Continued, page 15 of 26

IND302-52 The proposed acquisition of conservation easements cited on page 4-625 of the DEIS is in error with respect to conservation easements for federal mitigation. BLM and Forest Service have no plans to acquire conservation easements on private land. The specific compensatory mitigation actions proposed by the BLM and Forest Service including road decommissioning are discussed in section 2.1.4 and Appendix F of the DEIS. An OHV control plan is a part of attachment 19 to the plan of developments filed with Pacific Connector's 2013 application to FERC and OHV control is also discussed in section 4.10.2.5 of the DEIS.

IND302-53 Based on comments received from FWS we are considering changing our assessment of impacts on Pacific Fisher to "Likely to Adversely Affect." This would be reflected in a future addendum to the FERC BA.

IND302-54 Comment noted. Impact to marbled murrelets and spotted owls are discussed in section 4.7.1.2.

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**Fish**

**Coho Salmon-Southern Oregon/Northern California Coast ESU- "likely to adversely affect"**

This is a declining population. The damage being done to the Trail Creek Watershed by this project and the Rogue River drilling will be a further threat as this is a major spawning area. Trail Creek is already water quantity limited in the summer and temperatures accede what these fish need for survival. Even though the pipeline will not go through the main stem, the sediment and activities from a major industrial project could be limiting. The crossing of so many rivers and streams could affect water quality needed for eggs and juveniles to survive. The dams (although not part of this project) are also limiting for fish passage. Removal of dams in the Klamath could be beneficial for fish in the long term.

**Coho Salmon-Oregon Coast ESU- "likely to adversely affect"**

This fishery is very important for not only tourism but the livelihood of many people. The loss of this fishery would be catastrophic. The pipeline will provide some jobs but destroying this fishery could potentially affect many more people. The reasons for adversely affecting this species are numerous and listed in the DEIS (pg. 643-645).

**North American Green Sturgeon-Southern Distinct Population Segment- "likely to adversely affect"**

This fish occurs in Coos Bay and adjacent waterbodies and is considered abundant there. The lifecycle of this fish could be disrupted by the project construction, dredging, and disruption of the food supply.

**Lost River Sucker-Federally and State Endangered-"likely to adversely affect"/not likely to adversely affect critical habitat"**

This fish is part of the Klamath ecosystem that will be crossed by the pipeline. If stream and river crossings don't go as planned this fish could be impacted

**Shortnose Sucker-Federal/State Endangered**

This fish also lives in the Klamath ecosystem. The same parameters apply to it as to the Lost River Sucker

Fish salvage operations must be done carefully by people who know what they are doing. Electroshocking and Seining do not seem to be appropriate methods for this.

IND302-55

**4. GEOLOGY/SOILS**

**Seismic-Related Hazards**

**Jordan Cove/Sitka Spruce Belt**

The location of the LNG Terminal and related facilities on the Cascadia Subduction Zone does not seem to be a good place to put a LNG facility. Even though seismic activity has been low in recent years, the fact that it could start again at any time indicates plans for the location of this plant might have been reconsidered. The expense of this and all the other funds spent on securing the pipeline almost seem prohibitive even when LWD prices are high. Hydric soils in this area show severe erosion potential from water and wind. Soil Liquefaction and lateral spreading are also a distinct possibility should an earthquake occur. According to the DEIS, the plant will be built to withstand earthquakes of all types. What about a possible Tsunami? Mitigation plans are in place but could they really take care of all possibilities? The question

IND302-56

IND302-55 Pacific Connector has developed a Fish Salvage Plan.

IND302-56 See the discussion of tsunami hazards in section 4.2.1.2. See also the response to IND1-4.

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comes to mind-why build this facility in this area in the first place? Is there no more stable area on the west coast? The DEIS claims that no LNG facilities were damaged in Japan during the Fukushima earthquake. However, I am looking at a picture of a LNG/LPG storage plant in Chiba, Tokyo Bay, March 11, 2011 cracked by the earthquake and erupting into a huge fireball that took 11 days to extinguish. For more information contact Oregon Sierra club/1821 SE Ankeny St/Portland 97214/503-238-0442 EX 300. Building of this facility will change the entire character of Coos Bay and surrounding environs in order to guarantee its safety and security. There still exist chances for problems in the next 50 years. More permits are needed that Pacific Connector has not applied for. Even though some of these soils are considered compacted from years of industrial use, the soil types are not compactable.

#### Contaminated Sites

It is commendable that Pacific Connector is willing to take on the clean-up of some of the most contaminated sites that exist on the property. This is important because of the permeability of the soils would allow contamination to travel fast to a destination of significance. It is also surprising that given the previous uses, that the site is not more contaminated than it is.

#### 1. North Pacific Coast Range

**Landslides-** This area has the most danger for rapidly moving landslides

It is also characterized by highly compactible soils with erodible potential due to steep slopes indicating reclamation sensitivity. Unless the pipeline is located on a flat ridgetop, extra measures will be required to keep the pipe in place. This and the Jordan Cove will be the strongest place where seismic activity is likely to occur. The Coquille River shows areas of high erosion and possibilities for high compaction. Disposal sites such as the Sandy Creek Quarry in the Coquille watershed are problem areas that should be closely monitored. The fact that these erodible soils can contribute to moving landslides would indicate that this site is a potential problem.

#### 2. Western Cascades-Siskiyou-Trinity Area- Roseburg BLM/Umpqua NF/Medford BLM (Douglas-Jackson Counties)

#### Seismic Activity Potential

The South Umpqua and Rogue River both have a high Liquefaction and Lateral Spreading potential. It is important that this be monitored and the drilling plans be adjusted should this situation develop. It is possible that the instability of these soils in these rivers make them unsuitable for this type of crossing. For example, in the Trail Creek watershed in Jackson County which will carry a disproportionate amount of the pipeline, (for the size of the watershed) it is important to note and investigate the slumps that exist in areas of soil instability.

**Dominant Soil Types** crossed by the pipeline are the Ruch-Medford (red clay) and the Medco-McMullin complex (Jackson County) or some variation which are dominated by steep slopes. These rocky soils have a clay component and are subject to compaction. Efforts to replant trees after logging are not always successful. Permeability is very slow. Digging through this ground might proceed slowly.

IND302-57

IND302-58

IND302-56

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IND302-57 All of the west coast in the United States is subject to seismic activity. This risk has not prevented development. Rather, local building codes are designed to prevent or limit major seismic damage. Chile, which has experienced major earthquakes, has shown this is possible. The criteria used by Jordan Cove to select its terminal location are discussed in section 3.3.1.

IND302-58 See our responses to comments IND51-7 and IND245-16.

IND302-59 Comment noted. The EIS includes requirements that the route be surveyed for unstable areas and the pipeline routed and/or designed accordingly.

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**The Speaker-Beckman-Josephine complex-** The Speaker-Nonpareil complex and others mentioned on pg. 4-309 of the DEIS predominate in Douglas County, are highly erodible and don't hold water. Components of these soils are clays subject to compaction. Potential puddling can occur when soils are wet. The general problems with clay soils in Jackson and Douglas counties is that the soils will harden and sometimes subsoiling makes the problem worse. These soils are generally used for tree growing, although when disturbed can become very hard to work with. Although there is variation within these soil types they tend to fall into similar categories as far as slope shape and steepness and clay component are concerned. **Siskiyou consociations** often associated with the clay soils have some granitic components that are highly erodible and tend to be on steep slopes. The hazard of water erosion is high. At this time these soils are used for timber production and road density has contributed to soil problems. These units can be subject to slumping and ground based yarding should be discouraged. It was unclear if the pipeline will be crossing these soils.

#### Mine Hazards/Mineral Resources

The Thomason Mine site which is now inactive is crossed by the pipeline route on East Cow Creek. Trace amounts of Mercury have been found in the soils. This is something to pay attention to. "Something else that is more significant is those six areas with county zoning that recognizes the potential for future mineral resource development" pg. 4-279. Therefore many types of extractive industries could have interests that conflict with the pipeline sighting. Pg. 4-279. These are possible conflicts that could emerge in the future that should be considered now-not just in the DEIS but by Pacific Connector and other interested parties.

**4. Klamath/Basin and Range-** Klamath Falls area has had some seismic activity. Pacific Connector agrees to monitor this and devise a plan that would be completed prior to pipeline installation. This would be better if it were completed sooner so that it could be evaluated by the FEIS. It is important to implement plans with caution. It should also be noted that there are geothermal leases in the area near the pipeline route. Some of the soils in this area are Saline/Sodic meaning they have a high salt component. Seed mixes used to revegetate them are specialized. Most of these soil types are subject to compaction and have reclamation sensitivity. In spite of this, many of these soil types have components listed as prime farm land. However, the components that need to be added and the other restrictive qualities(seed types) mean that this would not normally be a prime farmland area. This area was established as such years ago by the federal government when it should have been kept as an important fishery. There has been a conflict of interest over the years. Removal of the dams will establish it again as a fishery with agriculture being a secondary use.

#### COMMON TO ALL TRAVERSED AREAS

##### Channel Migration/Streambed Scour

Because this pipeline will cross so many water bodies, especially the major rivers, it is very important to acknowledge this problem. The recent Yellowstone River incident magnifies the chances being taken when drilling under major rivers and crossing smaller bodies by the methods delineated in the DEIS. It seems as though care has been taken to acknowledge these potential problems but what will be lost if it does not work is extremely valuable to the people of Southern Oregon.

IND302-60

IND302-61

IND302-62

IND302-63

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- IND302-60 Soil limitations along the pipeline route are discussed in section 4.3.2 of the EIS.
- IND302-61 See response to IND2-8.
- IND302-62 Seismic activity in the Klamath Basin, and measures Pacific Connector would implement to protect its pipeline are discussed in section 4.2.2.2.
- IND302-63 The incident at the Yellowstone River involved an old oil pipeline, not regulated by the FERC. New welded steel FERC regulated pipelines are not likely to break or leak, as discussed in section 4.13. The potential for stream scour is discussed in sections 4.2.2.2 and 4.4.2.2.

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IND302-64 Blasting along the pipeline route is discussed in section 4.2.2.5.

**Disposal Sites**

These include quarries, TEWAs, permanent storage sites for excavated material, and other areas that Pacific Connector will use for the project. The proper disposal seems to be of interest to this company as is the cleanup of the Jordan Cove area. State and Federal agencies should monitor this process and the permitting process should be complied with. This of course, increases the pipeline footprint. The Sandy Creek Quarry in the Coquille watershed has been mentioned above. Jackson County also has quarries that have mining waste. Some are being reclaimed.

**Blasting**

Any place with igneous rock would have the potential for the necessity for blasting. However, a high potential could apply to parts of all areas except the Coast Range. Pre-blasting inspections are especially important with written reports must be provided to private land owners. A Federal process for this is probably already in place. These documents must be able to have standing in a court of law and the land owner must have ready access to redress. Wells and water supplies should be given priority within 500 ft.-not 200. Do not count on the effects being temporary (although they may be). Changes in aquifers and water courses can be long term.

IND302-64

**Compaction Potential**

The clay soil types have this problem and are hard to work with because the soil becomes hardened with moisture. Heavy equipment and roads both contribute to this problem. Soil ripping and related processes will not necessarily solve the problem. BLM has been dealing with this problem in forest projects for many years and has begun to develop new types of equipment that will ameliorate this condition to some extent. Regardless of all mitigation measures, when clay soils get wet the problem will be repeated. The high road density on BLM lands has contributed to this problem.

**Revegetation Potential**

This will be important for private landowners.

**Restrictive Layer**

Clays can develop into this type of material when they are wet and continuously compacted. Many naturally thin profile soils fall into this category. The fact that 60.6 % of the pipeline length falls into this category will make trenching slow and difficult.

**Steep Slopes (greater than 30%)**

Many of the soils on these steep slopes in the Siskiyou/Trinity Western Cascades tend to be erodible and shistic in nature often made up of decomposing granite. They do not hold water and ravel easily.

**Large Stones**

With the exception of very large rocks, removal of stones from the soil mixture could cause compacting and puddling in soils with high clay content. Soil amendments may be added to prevent this problem from becoming severe. Using large rocks to block OHV traffic is a good idea except they will probably figure out a way to go around and tear up more land.

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**Above Ground Facilities/Temporary Storage Yards** would include Flounce Rock for a communication site. This is a remote area with an unusual rock formation that people visit. It is not a tourist attraction but remains an attractive spot that does not need a communication tower polluting the visual landscape. In the late 90s there was a BLM timber sale project in the area. Other above ground facilities will be necessary to the operation of the pipeline. The yards in the Coos County area are the only ones that could have problems with sandy soils. However, The Coquille Yard –MP 18.8 shows some serious hazardous waste problems including Asbestos. The ODEQ signed off on this in 1998 saying “no further action required.” This should be checked again. It is important that Pacific Connector fully develop the plan to deal with this and other potential contamination sites.

**Prime Farmland**

This could be actual farmland being used in Agricultural production today or land that has since been converted to other uses i.e. residential, livestock or timber. The DEIS states that no prime agricultural land being used for this purpose will be taken out of production. This is important.

**Access Roads-** This will be addressed in the next section under Roads/Transportation

**Federal Lands/Soils**

These lands have mainly been used for timber production. Soils vary in accordance with location as previously discussed. Many of these lands are being reclaimed at this time and many are still used for timber production. Clay and/or erodible soils have not been treated well in the past but awareness is starting to look at this issue differently in the agencies. Many are still classified as having revegetation potential although tree planting continues with mixed success. Early successional landscape should be a prime focus for fire as drought conditions take hold in Southern Oregon.

**Ground Based Yarding-** The problem of the prevalence of ground based yarding methods on slopes below 30% continues to be ignored by the agencies. Although equipment has improved this still continues to be the preferred method of yarding on flatter landscapes. Many other criteria should enter into the judgment to yard by ground based methods. Many sensitive soils should not be subject to this type of operation regardless of slope. Fire is a natural part of the ecosystem for most of the areas being traversed by the pipeline. However, the drought (which is part of climate change in this area) has amplified recent stand replacement fires that have taken their toll on fragile soils. DEIS-“*High intensity fires and rainfall have been the primary natural disturbance processes that affect soil erosion on BLM and NFS lands in the project area*” pg. 4-332. I would add to that- past logging and yarding methods without regard for soil series variations.

**Rain on Snow Events** which take place at higher elevations in the **Transient Snow Zone** can also turn roads into streams carrying with them sediment that ends up in streams and rivers. The pipeline will cross a few of these areas.

**Displacement and Mixing of soil**

This was an interesting segment that should be taken into consideration by all the agencies and land managers.

IND302-65

IND302-66

IND302-67

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IND302-65 In section 4.3.2.1, under “Contaminated Soils” associated with the Pacific Connector Pipeline Project,” the text reads: “...prior to using that yard, Pacific Connector would further investigate the status of this site with the ODEQ.” In addition, Pacific Connector developed a Contaminated Substances Discovery Plan.

IND302-66 Timber clearing methods, including yardings, are discussed in section 4.5.2.2.

IND302-67 The DEIS in the section cited was a discussion of natural disturbance processes. Logging and yarding are human disturbances. The DEIS discusses logging, yarding, and other human disturbances, including effects on soils, on page 4-455.



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#### Mitigation Measures

1. Leaving slash generated during timber clearing on the corridor could have the intended purpose. However, slash creates a huge fire risk that logging operations have had to deal with in the past.
2. Other mitigation measures are worth a try.

#### Cumulative Impacts

The fact that "30-70% of the Project area would likely have detrimental soil conditions from mixing, displacement or compaction" pg. 4-337 is at least an honest assessment of the situation when discussing effects on soils.

The FS report on Cumulative Impacts was included but nothing from the BLM was available. Will this report be available at a later time?

IND302-68

#### 5. ROADS

Even though this information was available throughout the document, I am including it as a separate issue because it covers all categories.

Roads are the single most landscape altering item in these ecosystems. Road densities are extremely high on both private and federal lands. These roads contribute to the sediment load in our rivers and streams and to compaction and erosion of soils.

Of necessity, new roads will be added for this project. Mitigation measures include road improvements that are important and decommissioning of a number of roads on Federal lands. It should be noted, however that road decommissioning while a great improvement, still leaves a footprint on the land that can be opened up again at any time. This is just a start for this process. We need more of these roads put out of commission. It would have been informative to have a total mileage of decommissioned roads for BLM and FS for the entire project.

IND302-69

OHV trails are a major problem and won't be stopped by just putting up barriers. A human presence is often needed to enforce laws. However, the counties have little money to do this.

#### 6. FIRE/FUELS

Fire regimes in the Roseburg and Medford BLM districts are a part of the natural landscape and are intensified by hot dry summers. There are often periods of time when all heavy equipment including chainsaws is shut down because of fire risk in forested areas. The Pacific Connector schedule for much of the project is between April and November. Not only does this schedule conflict with bird and wildlife breeding seasons but it coincides with fire season as well.

Southern Oregon is currently experiencing a drought cycle in which winters are warmer with less precipitation and summers are hotter and drier with greater fire risk. The winter, with the possible exception of December would be the best time for project construction except for Elk winter range.

IND302-70

We have entered a cycle of high intensity, stand replacement fires and a longer fire season. Therefore it is not just project activities that create fire risk but the time of year and conditions along the route. This was not adequately addressed in the DEIS.

The fire break created by project activities would depend on the landscape it was crossing. In an LSOG forest it could be detrimental due to the fact that mature OG forests tend to be moist and fire repellent. The cutting of these forests would create a heavy slash burden and the exposed soil would dry out causing increased temperatures and a drier environment, making the area more susceptible to fire. Since the pipeline placement requires going through this type of forest, it is

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- IND302-68 The Forest Service cumulative impacts paragraph on page 4-343 was provided as part of a discussion on the proposed plan amendments for waiving detrimental soil condition thresholds on NFS lands. BLM soil standards are not exceeded and so there are no proposed amendments for waiving soil standards for the BLM. Additional information regarding sensitive soils on both BLM and NFS lands will be provided in the FEIS.
- IND302-69 The total miles of road decommissioning proposed by the BLM and the Forest Service is summarized in Table 2.1.4-1 of the DEIS.
- IND302-70 The EIS discusses fire regimes in section 4.5.1.2. Section 4.13 discusses pipeline standards to minimize fire risk to forest lands.

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very important that no further LSOG forest be removed. Fuel breaks on either side of the footprint are not desirable. For younger forests, plantations, and brush fields, it is important to thin aggressively to eliminate fire risk as much as possible. Since plantations are especially good targets for fire risk, it is important that these be reduced and trees be spaced appropriately. The TWAS where slash and other items needed for the project are to be stored are especially susceptible to fire risk. Slash is often left in the forest after logging, but this is a dangerous practice that should be eliminated. Cutting in Riparian areas could also have a detrimental consequence for fire risk as well as stream health which has been addressed earlier.

**Mitigation Measures**

**1. Decommissioning of Unused Roads** This was addressed under **ROADS**. It is important to note that road density which was addressed earlier, contributes to fire risk. It is important to decommission as many roads as possible. Although the decommissioning process increases the presence of sediment in the short term, in the long term it could restore the landscape to a condition in which reclamation needs will be less likely. It still should be noted that the process will leave a footprint for several years.

**2. Conversion of Matrix Lands to LSRs**

The advantages created by this will depend on the landscape condition of those lands that are converted. This could be a long-term positive gain for forest health. However, it could also mean trading prime habitat for that of lower quality.

**3. Purchasing Private Lands to convert to Matrix**

Private lands normally are lands that have undergone industrial forestry-i.e. Clear-cut, plantation, and short rotation harvest. Herbicides are used intensely on these lands and streams tend to have more sediment and fewer fish. These lands could benefit from being transferred to federal Matrix classification under the NWFP and would provide more volume for the federal timber base.

**4. Silvicultural Projects**

If these projects take place in LSOG forests that are already fire resistant, there will be an increased fire risk. Density Management of **early and mid-successional forests will decrease** the risk of high intensity fires. Forestry projects, in the past have usually selected the larger trees of highest commercial value and left the lower grade material. This type of management increases fire risk and reduces the long term productivity and health of the forest.

**5. Creating Snags**-It is questionable if creating snags from healthy trees will enhance wildlife habitat in the short term. In the long term, it could be useful. If the snags are in a remote undisturbed area, this could be helpful. If they are close to the project and the edge, it is doubtful if it will be used for the intended purpose.

**7. SAFETY/ACCIDENTS**

The possibility of accidents due to leaks and possible explosions are made more probable by the lower safety standards approved for rural areas. The possibility of fires due to explosions caused by leaks, are especially of concern in Southern Oregon when summer drought conditions are highest. The concern about fire is rightfully expressed throughout the DEIS.

IND302-71 The BLM and Forest Service believe that silvicultural treatments such as stand density reduction, underburning, and pre-commercial thinning would reduce the potential for large scale wild fires in the region. Snag replacement in the right-of-way after pipeline installation would increase habitat for wildlife.

IND302-71

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IND302-72 See the response to IND1-5.

#### CUMULATIVE AFFECTS

1. Forestry-Ongoing timber sale projects by the agencies and private land owners will continue to fragment the forests. As I have repeated many times in this paper, plantations are not forests. In the long term, they may or may not become them. The diversity of an LSOG forest cannot be duplicated by a plantation. Therefore thinning and planting, depending on the landscape being replaced will not replace the characteristics of an LSOG. Plantations are also fire prone and are usually the first to burn and the longest to continue burning. Because of the monocultural nature of plantations they often require herbicides to endure which discourages wildlife and fish. The mitigation measures listed in the document encourage this type of ecosystem management. The clearing of 1000 acres for a "fire break" will not necessarily discourage fires. Fuels reduction projects of brush, and small diameter wood removal are to be encouraged. If this is the type of project that Pacific Connector wishes to fund the agencies would be grateful since they have to depend on timber revenues for money.

2. Wildlife-The biggest loss from this project will be the destruction of T/E wildlife that is listed because they are already in decline. The cumulative effects of the large scale landscape footprint of this project plus the on-going projects that the agencies and private industry partake in will devastate species that have limited ranges and specific requirements for survival. The fact that other habitats are being considered is positive. However, even though some replacement areas might be repopulated, the lack of mobility of the original species i.e. breeding seasons for the NSO will still make these losses severe. Fish such as Coho that are already endangered will have a hard time with sediment, especially if the project is conducted during spawning season. Even though Coho are not considered endangered in Coos Bay, the effects that would occur downstream from loss in that area could have impacts.

#### 3. Water Crossings/Impacts

The changes being made in the Jordan Cove/Coos Bay Estuary are irreversible. This will expand the industrial zone which will become the principal land use. Other projects in the area will develop around this use.

The water crossings of the streams will also become part of the industrial zone. The fisheries and recreation could diminish as a result of this.

As expressed earlier in this paper, we are now in a severe drought situation. The enormous use of water that this project requires is irresponsible considering this. Other uses such as agriculture might be diminished due to this.

#### 4. Non Industrial Private Land

Most small private property owners that are impacted by this project are opposed to it. As a land owner, I can empathize with these people. The compensation they are receiving is not worth the loss of the use of their land and does not pay what the land is worth in commercial value. The decrease in resale value is something they are stuck with. The use of "eminent domain" for the right-of-way by a foreign company against American land owners should be illegal.

IND302-72

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**IND302** Continued, page 24 of 26

IND302-73 See the response to IND1-1 and IND1-3.

5. Climate Change

This issue is covered briefly in the DEIS. It is an important consideration when planning a long term project. The IPCC report of 11-1-14 determined a need to reduce our reliance on fossil fuels by over 80%. How will this massive fossil fuel project fit into that reduction? The changes being brought about by climate change can be seen locally in the drought conditions that we are presently experiencing and will continue to experience in the near future. Increased use of water by "fracking" in the interior west could also have consequences. Rising sea levels could also affect the Jordan Cove facility. For a project that will have a lifetime of 50 years, these are considerations to take into account.

IND302-73

Thank you for allowing me to comment on this project and for your consideration.

Sincerely,



SUSAN DELLES  
2801 SYKES CREEK RD  
ROGUE RIVER OR 97537-9771  
[sdelles@jeffnet.org](mailto:sdelles@jeffnet.org)  
541-582-0632

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12/11/14

To whom it may concern:

My name is Susan Delles I live in the Evans Creek Watershed on Sykes Creek Rd-R4W-TWP34s-Section 26 in the BLM Butte Falls Resource Area. I have spent 30 years commenting on various BLM projects through the NEPA process.

I am extremely concerned and appalled about the Jordan Cove Pipeline which will go through our Resource Area. Even though I personally don't live that close, I believe the character and quality of life of our entire Resource Area and that of the Rogue Valley will be negatively changed by this intrusion.

#### RIVERS

This pipeline will cross 379 bodies of water including five major rivers. It will affect the community of Trail Creek on the Rogue River which is a major Coho spawning area. I am personally familiar with that area where I have written comments on various BLM projects. This project will destroy that watershed and seriously threaten the Coho fishery on the Rogue River. I am totally opposed to the idea of tunneling under the Rogue River which is a major body of water for recreation and tourism.

Water quality limited streams are already a problem for our Southern Oregon fisheries. The potential damage to Riparian Zones and sediment delivery could have major impacts on the stressed fish populations some of which are endangered.

#### ACCIDENTS

The possibility of accidents due to leaks and possible explosions are made more probable by the lower safety standards approved for rural areas. The possibility of fires, due to explosions caused by leaks are especially of concern in Southern Oregon when summer drought conditions are highest. Fires spread rapidly in this area.

The companies chosen to build the pipeline-Williams and PP&L have poor safety records. PP&L is still fighting lawsuits from the city of San Bruno over destruction of houses and properties caused by a gas leak a number of years ago.

#### PRIVATE PROPERTY

Most private land owners that are impacted by this project are opposed to it. As a land owner I can empathize with these people. The use of "eminent domain" for the right-of-way by a foreign company against American land owners should be illegal. The compensation received in most cases will not be what the land is worth and the decrease of resale value is obvious.

#### COOS BAY

Many people in Coos Bay are in favor of this project because of the jobs that will be created. Is the environmental damage to the Coos Bay estuary by dredging and the loss of endangered wild life really worth it? Have you also considered the threat of building this terminal on an earthquake subduction zone?

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IND302 Continued, page 26 of 26

2

There are many other problems with this project with limited time for presentation. Other issues are included below.

This project is a boondoggle that will create large profits for some corporations at the expense of the residents and tax payers of this state. Please reconsider your decision.  
Thank you for your consideration.

---

Other Issues

Climate Change- The IPCC report 11-1-14 determined a need to reduce our reliance on fossil fuels by over 80%. How will this massive fossil fuel project fit into that reduction? This was not adequately addressed in the analysis.

Wildlife/Endangered Species -The clearcuts required for this project will heavily impact wildlife, especially endangered species that depend on these forests. Ocean species such as whales and sea turtles would also be impacted. Twenty Nine federally listed or threatened species would be affected.

Exporting Gas overseas will probably increase gas prices here and we will not see any of the benefits of this project.

Increase of fracking in the interior west means increased water use in dry climates and increase of methane leaks.

Susan Delles  
2801 Sykes Creek Rd  
Rogue River OR 97537  
[sdelles@jeffnet.org](mailto:sdelles@jeffnet.org)

20150212-5090 FERC PDF (Unofficial) 2/12/2015 12:04:18 PM

**IND303 Thomas C. Burdett, North Bend, OR**

IND303

IND303-1 Comment noted.

IND303-2 Comment noted.

Thomas C Burdett, North Bend, OR.

To Whom This Concerns,

I have reviewed the Draft Environmental Impact Statement and concur with FERC's findings. As with any project, the community and environment will be affected to a certain degree. The mitigation measures Jordan Cove Energy (JCE) has proposed and/or agreed to incorporate into both the short and long term construction/operation of these facilities drastically reduces these adversities. In reviewing this document it is evident that both FERC and JCE have gone above and beyond in ensuring this project will be a success to all parties involved. I ask that FERC proceed with the permitting process to grant JCE their permit for this project. I also urge you to review the alternate Blue Ridge Route for the pipeline. Although both are viable options, it appears that the Blue Ridge Route would be a more suitable region, as it affects less private parcels, and above all greater public safety both during construction and operation.

IND303-1

IND303-2

Respectfully,

Thomas C. Burdett

BnT Promotional Products

BACC / IAT, Board Director

C: 541-404-1028

20150212-5091 FERC PDF (Unofficial) 2/12/2015 12:11:35 PM

IND304

Amy Levin, Coos Bay, OR.

The DEIS for Jordan Cove in Coos Bay does not take into consideration the impact of building a 420 Megawatt power plant to provide the electricity needed to run the four, 66,000 horsepower refrigeration compressors that will need to run 24-7 in order to chill 1 Billion cubic feet of natural gas each day to a temperature of minus 260 degrees. Where will this energy come from? How will it impact the electrical grid for the North Bend, Coos Bay usage? Also this plant will become one of the largest sources of Carbon Dioxide emissions produced in Oregon. The Jordan Cove LNG Terminal and Pipeline environmental impact study failed to consider this projects contribution to our climate change problems. The Intergovernmental Panel on Climate Change (IPCC, 11-14 report) determined that by 2050 we must have reduced our reliance on fossil fuels by over 80%. The Jordan Cove terminal will have decades of life left by 2050. The DEIS fails to consider if this fossil fuel project would fit into that reduction, or if it could tip us over into unlivable climate change. Also a percentage of methane leaks unburned into the atmosphere when drilling, transporting, and processing into LNG. This methane is 86 times more potent greenhouse gas than burning coal. The DEIS does not consider these climate impacts of LNG. In addition this company's stated Purpose and Need for this project (in "Resource Report One") is to be able to continue and expand fracking. Since this project will facilitate increased fracking, the DEIS should have consider the cumulative impacts of fracking on our environment. Finally, Veresen, a Canadian company is asking to consider their enhanced profits from exporting LNG as a "public benefit", so they can condemn the land needed for the pipeline. Do not to give the right to a foreign company to condemn Oregonians land.

IND304-1

IND304-2

IND304-3

IND304-4

## IND304 Amy Levin, Coos Bay, OR

- IND304-1 The power plant is discussed throughout the EIS.
- IND304-2 See the response to IND1-1.
- IND304-3 See the response to IND6-1.
- IND304-4 The Commission would consider the public benefit of the Project in its Order.



20150212-5094 FERC PDF (Unofficial) 2/12/2015 12:27:31 PM

IND305

**IND305     Augustin A. Moses, Renton, WA**

IND305-1     Comment noted.

Augustin A Moses, Renton, WA.  
Currently there are no airspace impacts due to the project and therefore no comments. | IND305-1

20150212-5095 FERC PDF (Unofficial) 2/12/2015 12:27:57 PM

IND306

**IND306 Don Canavan, Coos Bay, OR**

IND306-1 The EIS concludes that significant adverse ecological impacts can be mitigated. Project safety is discussed in section 4.13.

don canavan, coos bay, OR.  
This is a project that is destructive to the environment in two ways: 1) the actual physical plant and pipeline will disrupt ecological balance; 2) the increase of fossil fuel use will increase the demise of the human species on this planet (despite cynical denials to the contrary). Finally, this is a highly volatile and dangerous method of production and transport and puts everyone near the facilities at risk of death or injury. This industry is trying to sell us the rope upon which they will lynch us.

IND306-1

20150212-5106 FERC PDF (Unofficial) 2/12/2015 12:50:44 PM

IND307

Maryann Rohrer, North Bend, OR.

I agree totally with this quote from Waterkeeper Alliance in Talent Oregon which states:

"The world's preeminent scientific body on climate change has stated that we have already taken up a huge amount of our global budget for greenhouse gas emissions and we have very little room left if we want to avoid catastrophic climate change. This means we must keep roughly 2/3rds of proven reserves of fossil fuels in the ground.

Yet, those who stand to profit more from fossil fuel extraction are furiously trying to dig out as much as they can before climate impacts can no longer be denied and the tides are turned toward renewable energy sources.

One such project is the Jordan Cove Liquefied Natural Gas (LNG) proposal that would construct a 230-mile pipeline to transport fracked gas from the Rocky Mountain states to export from the Oregon coast at Coos Bay.

The Jordan Cove gas export project would make a Canadian gas company filthy rich by bloating the dangerous fracking frenzy at the expense of average Americans. Building the first gas export terminal on the U.S. west coast would accelerate more fracking in the Rocky Mountain States, yet the impacts of increased fracking to feed this export project are not found anywhere in the federal analysis.

IND307-1

Similarly, despite scientific evidence that fracking and methane (natural gas is primarily methane) are contributing significantly to greenhouse emissions, there is nothing in the federal analysis that considers the impacts of this proposal on our climate.

IND307-2

Just like with Keystone XL, the gas company keeps touting the temporary jobs that will be created during construction. We certainly need good jobs, but temporary construction jobs in fossil fuel development are not the answer for a sustainable future. The U.S. should be a leader in shifting us away from fossil fuels and into a robust renewable energy culture. One million dollars of investment in oil and gas development creates 5 jobs. The same amount of investment in solar creates more than 14 jobs.

IND307-3

The project would have tremendous impacts including logging streamside forests, dumping fish-suffocating sediment into waterways that are critical habitat for imperiled salmon, fragmenting important habitat for imperiled wildlife species and extensive dredging in the sensitive Coos Bay estuary. This proposal also creates a wealth of safety concerns, including an export terminal built on a sand spit that is vulnerable to earthquakes and tsunamis.

Exporting gas from the western U.S. would not only continue our addiction to harmful fossil fuels, but it would harm both the average American and U.S. businesses by raising bills for ratepayers and threatening an American manufacturing renaissance. Today, U.S. manufacturers are putting

IND307-4

## IND307 Maryann Rohrer, North Bend, OR

IND307-1 See the response to IND6-1.

IND307-2 See the response to IND1-1.

IND307-3 Keystone XL is an oil pipeline that is not regulated by the FERC. Jobs are discussed in section 4.8 of the EIS.

IND307-4 See the response to IND37-4.

20150212-5106 FERC PDF (Unofficial) 2/12/2015 12:50:44 PM

Americans back to work and creating high-paying jobs due to an abundance of affordable natural gas, which is vastly preferable to sending our energy resources, and jobs, overseas.

IND307-4  
cont'd

And last but not least, hundreds of landowners are being threatened with eminent domain for no public benefit; rather a Canadian company wants to export gas to Asia.

IND307-5

This project is clearly not in the public interest and is only convenient for a foreign-owned gas company to make billions by ballooning the fracking frenzy."

Please deny this project for the reasons enumerated above.

IND307-6

**IND307 Continued, page 2 of 2**

IND307-5 The U.S. Congress decided to convey the power of eminent domain to private companies that receive a Certificate from the FERC when it passed section 7(h) of the NGA in 1947. See response to IND32-1.

IND307-6 Comment noted.

20150211-0031 PERC PDF (Unofficial) 02/11/2015

IND308

Ladies and Gentleman  
February 5, 2015

ORIGINAL

CP13-492  
CP13-483

FILED  
SECRETARY OF THE  
ENERGY

The proposed pipeline is just about a disaster waiting to happen on many fronts. The environmental impact report is very vague and needs to be update with information on the risks. I will try to point out some my interpretation of the facts. I have read most of the Environment Impact Report.

First on my list is air pollution. Then it mentions the present air quality in Eugene and the surrounding area, but it does not predict how much and where this bad air will go. I live Jackson County Oregon and recently we have had 10 days of bad air quality. Where will this pollution go? I surmise that this air pollutants will not stay in Coos Bay or even stay in Coos County or even the area around Eugene. You can look at the prevalent winds going from North to South.

My next big issue is safety. Has anybody looked at the pipeline break of natural gas in San Bruno Calif where 8 people died and over 150 homes were damaged. This pipeline is going through some very rural areas where nobody goes today. The issue is not this pipeline breaks or not, but is when will it break? How many people will jobs because of a fire in these rural areas? When there is a fire, how many fish and wildlife will be killed and then lose hunters and fisherman which means less tourists. Also, the EIR does not mention the loss of wildlife due to construction and then because of the loss habitat. When the pipeline breaks, what happens if it breaks near homes like Shady Cove or Coos Bay? Also, I saw the map of the pipeline coming with 50 feet of some homes. That would make feel very nervous to live there.

Recently there was 8 small earthquakes near Malin, Oregon. These earthquakes were in the minor category magnitude of 2.5 to 4.5. What happens if the pipeline breaks because of a earthquake. Also, Coos Bay is in the area of the Western Earthquake Subduction zone. The prediction is for a earthquake of 8 to 9.5. Could this pipeline survive a earthquake of this magnitude? I have seen any mention of earthquake in the EIR.

Another issue with this proposal is to go under 4 different rivers at a depth of 53 feet. The pipeline is 36 inches in diameter and this has never been done before. The EIR says they will evaluate this procedure when they are doing it. This is kind like looking at weather map when you are in the sky instead of looking at a weather map before you leave the ground.

Now, we all have witnessed what happened to the twin towers in New York City in 2001. I do not see any mention of survival rate of the pipeline if a plane was to hit the pipeline or liquefaction plant in Coos Bay either by natural causes or by a terrorists.

**IND308 Bruce Bauer, Medford, OR**

- IND308-1 The EIS is very specific and not vague.
- IND308-2 See section 4.12.1.1 for detailed information on air pollution associated with pipeline construction and operation. See section 4.12.1.1 for detailed information on air pollution associated with the LNG terminal construction and operation. Note that emissions would be well under federal air quality standards.
- IND308-3 Safety is addressed in section 4.13.9.
- IND308-4 The effects of earthquakes on the pipe are discussed in section 4.2.2.2.
- IND308-5 HDD crossings of major rivers by pipelines at least 36-inches-in-diameter have been done successfully many times before.
- IND308-6 Safety risks from reasonably foreseeable events are discussed in section 4.13 for the terminal, the LNG vessels, and the pipeline.

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Another issue of safety is the large capacity of the ships going to pick up the liquidified natural gas. The comments of FERG on this issue the ships have been built yet, so FERG can not talk there safety.

The Eir needs to address this issue before it is proposed. I have heard that one of these ships would be equal to many atomic bombs. Does the Oregon coast really want a atomic bomb on its coast?

The next issue is the company Williams which partnering with the Canadian Company Versen has a definite issue of safety and not complying with federal regulations. This is totally inexcusable and this company should be banned from operating any pipeline with the USA!

The next issue is the benefits to Southern Oregon. The tax issues would vary between 2 to 11 million dollars a year. That is good, but that is where the benefits end. The EIR mention 100 preferment jobs in Coos Bay and 45 more in Malin. Not all those jobs are full time jobs with benefits. Then when the pipeline breaks who is going to pay for cleanup? The oil tanker spill in Valdez Alaska is still be cleaned

up. A judge decided how much EXON is liable for the cleanup. Then will have the loss of jobs due to a fire on the pipeline. Oregon right now depends upon jobs in the tourists industry for hunters and hikers.

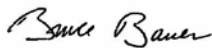
If people do not come to this area, how many people will lose their jobs.

Another issue that the EIR does not mention is what happens when the tar sands runs out of oil? What will become of the pipeline then? Do we just have a eyesore? Will the pipeline look like Detroit with its abandoned buildings?

Another big issue is climate change which the EIR does not mention. The states of Washington and California has been actively working to less carbon dioxide in the air which changing our climate. Have seen the drought in California or the mud slides in Washington?

Last but not least is the economics of this boondoggle proposal of a pipeline. We have a Canadian company doing the construction, so most of the workers will be from Canada. The shipping of the liquidification natural gas will go to China. So a Canadian company supplies natural gas to China and Oregon takes all the risks. I do not get it why this Canadian company want to this, unless it is pure greed with little care of Oregon people!

Thank You for reading and if I have made mistakes, please let me know.



Bruce Bauer  
PO Box 1604  
Medford, Oregon 97501

**IND308 Continued, page 2 of 2**

IND308-7 As discussed in section 4.13.6, LNG ships have been operating since 1959. The safety record is discussed in section 4.13.6.1., Vessel Oversight in 4.13.6.2 and the waterway suitability in 4.13.6.3.

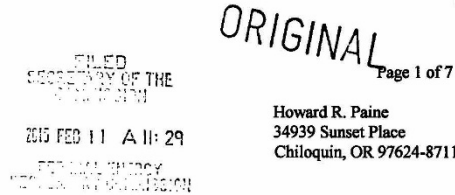
ND308-8 Employment is addressed in section 4.9.1.4. If a pipeline break did occur, cleanup costs would be the responsibility of whomever was at fault.

IND308-9 The proposed pipeline would transport natural gas, not tar sands oil.

IND308-10 The EIS (not EIR) discusses greenhouse gas emissions in section 4.14.3.12.

20150211-0015 FERC PDF (Unofficial) 02/11/2015

IND309



Howard R. Paine  
34939 Sunset Place  
Chiloquin, OR 97624-8711

February 5, 2015

Honorable Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First St. NE, Room 1A  
Washington, DC 20426

**RE: Jordan Cove Energy Project LP Docket No. CP13-483-000**  
**Pacific Connector Gas Pipeline LP Docket No. CP13-492-000**

Dear Secretary Bose:

Submitted herewith are my comments opposing the Jordan Cove Energy Project and the Pacific Connector Gas Pipeline.

Oregon has been my home for 83 years, the last 14 in Klamath County. I know Oregon well and have visited the Coos Bay/North Bend area hundreds of times. These proposed facilities are bad for Oregon.

1. Fossil fuel causes global warming and climate change
2. High risk of earthquake/tsunami at Jordan Cove transport facility.
3. High risk of earthquake in Klamath Falls area.
4. Impact on endangered species

I was surprised by some of the statements in your November 7, 2014 letter regarding the DEIS. You make it appear the Federal Energy Regulatory Commission supports this development. FERC is a U.S. government agency that should take a nonbiased position on this. How can you rightfully say these projects would result in some limited adverse environmental impacts that would be substantially reduced by mitigation?

IND309-1

How does the FERC plan to mitigate global warming caused by methane release from this project? How are you going to mitigate noise caused by the 41,000 horsepower Klamath Compressor Station? Cutting old growth trees in a dense forest cannot be mitigated. There is no mitigation for loss of riparian vegetation along rivers and streams that keep water cold for salmon and trout.

IND309-2

**IND309 Howard R. Paine, Chiloquin, OR**

- IND309-1 The Commission would not make a decision about this Project until the Order. The EIS provides data to support the finding that significant adverse environmental impacts can be mitigated.
- IND309-2 The DEIS analyses the Proposed Project, the project scope is discussed in section 1.3 and 1.4. This is not an EIS on methods to mitigate global warming.

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Docket Nos. CP13-483-000 and CP13-492-000

Page 2 of 7

**Endangered Species**

The proposed project would impact twenty-nine federally endangered or threatened species, including Coho Salmon, Lost River Sucker, Shortnose Sucker, Oregon Spotted Frog, Marbled Murrelet, Northern Spotted Owl, six species of whale and four species of sea turtle.

Land excavation, stream and river tunneling, riparian cuts, forest cuts, and estuary dredging impact these species.

**Violation of the Endangered Species Act**

Proposed actions by the Jordan Cove Energy Project LP and Pacific Connector Gas Pipeline LP violate the Endangered Species Act for these species:

**1. Northern Spotted Owl**

The continued existence of the Northern Spotted Owl is put in jeopardy by destroying critical habitat. The only habit this owl has is old growth forests. The applicant proposes to cut a 90 foot wide swath through these forests for a pipeline. This jeopardizes the continued existence of this owl.

**2. Lost River Sucker and Shortnose Sucker**

The continued existence of the Lost River Sucker and Shortnose Sucker is put in jeopardy by destroying habitat by a pipeline crossing of the Klamath River. Tunneling under the river for a 36 inch pipe will release toxic sediment that has accumulated in the river for hundreds of years. This toxic sediment will be consumed by the fish and they will die.

**3. Marbled Murrelet**

The continued existence of Marbled Murrelet is put in jeopardy by destroying critical nesting habit in old growth forests. Applicant plans to remove old growth trees for a pipeline.

**4. Coho Salmon**

The continued existence of Coho Salmon is put in jeopardy by removing streamside vegetation in rivers and streams needed to keep the water cold as required by this salmon.

**Global Warming/Climate Change**

FERC analysis failed to consider the danger this LNG facility will have on climate change. The Intergovernmental Panel on Climate Change determined that by 2050 we must reduce reliance on fossil fuels by over 80%. Approval of this facility means it will continue operating decades beyond that.

Canada has stated their purpose is to continue fracking and expand fracking. This means they want to continue exporting LNG forever.

**IND309 Continued, page 2 of 6**

IND309-3 Effects on listed species are discussed in section 4.7. The FERC will not violate the ESA, because we have produced a BA for the Project, to be reviewed by the FWS and NMFS, who will produce Biological Opinions in accordance with the ESA.

IND309-4 See the response to IND1.

IND309-3

IND309-4



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IND309 Continued, page 3 of 6

Docket Nos. CP13-483-000 and CP13-492-000

Page 3 of 7

The Jordan Cove Energy Project is seeking state permission to release 2.1 million metric tons of carbon dioxide and equivalents annually. Carbon dioxide is causing global warming and worldwide climate change.

Global warming has caused ocean temperatures to rise changing weather patterns worldwide. Here on the west coast we are having severe drought conditions affecting food crop production. Officials say California's drought could be the worst in 500 years. See: **EXHIBIT 1**

The National Oceanic and Atmospheric Administration reported: Over the past 50 years, global temperatures have increased at a rate that has not occurred for hundreds of thousands of years.

This is what Environmental Protective Agency said about Global Warming and Climate Change: *"Greenhouse gas emissions could cause a 1.8 to 6.3 deg. Fahrenheit rise in temperature during the next century, if atmospheric levels are not reduced."* See: **EXHIBIT 2**

A July, 2008 paper by the Natural Resources Defense Council shows the Western United States average temperatures had increased 1.7 deg. F from 2003 to 2007. See: **EXHIBIT 3**

**2014 Was The Hottest Year On Record Globally By Far.** *"What makes setting the record of hottest year in 2014 doubly impressive is that it occurred despite the fact we're still waiting for the start of El Nino. But this is what happens when a species keeps spewing record amounts of heat-trapping carbon pollution into the air, driving CO2 to levels in the air not seen for millions of years, when the planet was far hotter and sea levels tens of feet higher".* See: **EXHIBIT 4**

#### **Methane Leakage**

Leakage of methane occurs throughout the production, delivery and use stages of natural gas. Unburned methane traps more heat in the atmosphere than any other fuel product. Also, methane is extremely toxic to humans and wildlife.

This is what the Environmental Defense Fund said about methane leakage: *"While it is true natural gas burns cleaner than other fossil fuels, methane leaking during production, delivery and use of natural gas has the potential to undo much of the greenhouse gas benefits we think we're getting when natural gas is substituted for other fuels. It is more than 100 times more potent at trapping energy than carbon dioxide (CO2), the principal contributor to manmade climate change".* See: **EXHIBIT 5**

#### **Jordan Cove LNG Facility and Coos Bay/North Bend Earthquake Risk**

It is wrong to locate the Jordan Cove LNG Facility where a full rupture of the

IND309-5 See the response to IND89-4.

IND309-5

Docket Nos. CP13-483-000 and CP13-492-000

Page 4 of 7

Cascadia Subduction Zone is likely. The most dangerous portion of the fault line passes eight miles off the Coos Bay, Oregon coast. A Cascadia quake would cause a massive tsunami destroying the LNG facility and causing a gas fed inferno. A tanker full of LNG could be ripped from its shipping berth and grounded releasing a cloud of gas that would destroy the cities of Coos Bay and North Bend, killing everyone.

IND309-5

Scientists predict thousands will die from an earthquake expected anytime on US West Coast. See: **EXHIBIT 6**

Per the Oregonian newspaper, June 26, 2014—"The region's top seismic experts say such a quake could violently shake the entire Pacific Northwest for more than five minutes, liquefying soil, tossing massive structures off their foundations and sinking entire sections of Oregon's coastal landmass by several meters." They say, a megathrust earthquake off the Oregon coast is inevitable. Chris Goldfinger, an expert seismologist at Oregon State University said, "It should be an assumption that this will happen during the lifetime of the facility. From my perspective, and the probabilities, I would certainly have reservations about building one of these terminals down there".

Oregon State University Cascadia study: "earthquake risk looms large."  
See: **EXHIBIT 7**

The Oregon Seismic Safety Policy Advisory Commission had 150 experts report on a major earthquake hitting Oregon. That 2013 report warns that there is a 100 percent chance of a monster quake and tsunami occurring, and it could be soon. The last high magnitude quake in the Cascadia Subduction Zone occurred in year 1700. It had a magnitude between 8.7 and 9.2. Those experts say they are certain the next one will have a magnitude higher than 8.0. See: **EXHIBIT 8**

A comparison could be made between the 2011 Tohoku, Japan earthquake and a future Coos Bay/North Bend quake. The Tohoku 9.0 magnitude quake was 43 miles offshore and had 133 foot waves hitting the island. It had such force that it moved the island eight feet. The main difference between Tohoku and Coos Bay/North Bend is the Cascade Subduction Zone fault line is only 8 miles offshore.

A Portland engineering firm GeoEngineers, Inc, a geotechnical consulting firm hired by Pacific Connector Pipeline LP to evaluate geologic hazards did a report titled: Revised Geologic Hazards Report. This is an excerpt from that report, notice it mentions Klamath Falls. It says: "Two primary mechanisms for generating earthquakes of design significance exist along the pipeline alignment: 1) a major, regional earthquake associated with the Cascadia Subduction Zone; and 2) local earthquakes associated with a hot spot in the vicinity of Klamath Falls." **Note**—Their lengthy report is at: <http://www.co.coos.or.us/Portals/0/Planning/HBCU-13-04/exhibit%2022.pdf>

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Docket Nos. CP13-483-000 and CP13-492-000

Page 5 of 7

Since the proposed Jordan Cove facility is in a tsunami inundation zone the applicant believes creating a hill with dredge spills to elevate the terminal solves the problem. They also believe that dune sand is dense enough to resist liquefaction and spread during an earthquake. Those assumptions have no merit. Dredge spills will quickly liquefy. Many areas on the Oregon Coast near bays and estuaries have quicksand.

An earthquake and tsunami would inundate the facility including the primary and back-up power plants. Without power those two 80 million gallon tanks of liquefied natural gas would warm, expand and explode causing a massive fire.

#### Jordan Cove LNG Spill Impact

FERC claims that since there are no homes within a mile of the facility, an LNG spill vapor cloud or fire would be minimal. This raises a major question. When did FERC officials visit the site? Wind blows in Coos Bay constantly. If there was a spill, winds would take that vapor cloud to the nearest homes in North Bend and Coos Bay.

#### Jordan Cove Estuary Dredging

FERC claims the massive dredging would not significantly harm the estuary. They are wrong, this estuary is loaded with marine life. Dredging would destroy their habitat.

#### Pipeline

#### Geologic Faults in Klamath County

Klamath County has many geological faults along the pipeline route.

In 1993 Klamath Falls had two major earthquakes with magnitude 6.0. Those quakes caused two deaths and property damage of \$7.5 million. Destroyed the Courthouse.

As noted above in the applicants GeoEngineers earthquake study, they said, "local earthquakes associated with a hot spot in the vicinity of Klamath Falls." They are absolutely correct, there are many faults along the pipeline route in Klamath County. The city of Klamath Falls is in great danger if the highly pressurized 36 inch gas pipeline ruptures. The planned route is south of the city.

#### Pipeline Crossing Streams and Rivers

The pipeline will cross 400 water bodies, some multiple times. Tunneling under rivers and streams contaminates water and destroys fish habitat. The Klamath, Rogue, Umpqua, Coquille and Coos rivers with their connecting streams are Coho salmon spawning grounds.

#### Impact to Private Landowners

Approximately 150 miles of the 230-mile pipeline would be on private property. These landowners will be threatened with eminent domain so that the pipeline can run through

IND309-6

IND309-7

IND309-8

IND309-9

IND309-10

## IND309 Continued, page 5 of 6

IND309-6 See the response to IND-6-2.

IND309-7 The vapor analysis is presented in section 4.13.5.3. FERC staff visited the proposed location for the LNG terminal several times, as mentioned in section 1.6.

IND309-8 Information on dredging and disposal of dredged material is found in section 2.1.1.12. The Coos Bay navigation channel has been dredged by the COE for decades without apparent harm to the estuary and its marine life. The effects from dredging for this Project are addressed in sections 4.4.2.1, 4.6.2.2, and 4.6.2.3.

IND309-9 The DEIS discloses the number of waterbodies that would be crossed or impacts (see sections 4.4 and 4.6) see the recommendations that Pacific Connector file stream crossing plans and designs before the end of the comment period.

IND309-10 See the response to IND307-5.

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their property. This limits property owners use of their own property, they can't drill wells, use power augers for fence posts, and plant deep rooted plants.

**Pipeline Rupture**

Pipeline companies claim their pipelines are perfectly safe and never break. Look at the facts: A recent Wall Street Journal review found that there were 1,400 pipeline spills and accidents in the U.S. 2010-2013. According to their review, four in every five pipeline accidents are discovered by local residents, not the companies that own the pipelines.

Just last month (January 2015), five major pipeline ruptures occurred in the U.S., most notable the 42,000 gallon oil leak under the ice in Yellowstone River. That leak made all water unusable in Glendive, Montana.

**Noise Pollution**

The 41,000-horsepower Klamath Compressor Station at milepost (MP) 228.1 is about 2.5 miles from the city of Malin and 4 miles from the city of Merrill.

Compressor stations run 24/7 and are notorious for causing noise pollution. Some can be heard 5 to 8 miles away.

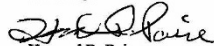
At MP 196 the route map shows a "Pumping Station". If this is a noise making device it will impact nearby residents.

**Conclusion**

For all the reasons addressed above, these applications should be denied. The U.S. should not be a party exporting a product that will cause more damage to the world ecosystem.

Public safety is the top concern with the Jordan Cove facility. FERC has wrongly downplayed a potential problem with a natural gas spill. They failed to consider the fact, that coastal winds swirl constantly in this area. The spill vapor cloud would quickly inundate both Coos Bay and North Bend, causing both cities to go up in flames—killing everyone.

Sincerely,

  
Howard R. Paine

This letter also contained several Exhibits that did not contain comments, so they are not included here.

**IND309 Continued, page 6 of 6**

IND309-11 Safety is addressed in section 4.13.9.

IND309-12 Noise levels associated with the compressor station are addressed in section 4.12.2.4. There is no "pumping station" associated with the Project.

IND309-13 The Commission would make its decision whether or not to authorize the Project in its Order.

IND309-14 The vapor analysis is presented in section 4.13.5.3.

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IND310

johanna harman, talent, OR.

Dear FERC:

Deny this project. Dirty energy is the past. Green energy is the future.

Public need or benefit has not been proven.  
The harms are unacceptable, impossible to mitigate.  
Public need requires this project be halted and your agency embrace the transition to renewables.

The primary beneficiary of this dirty energy project is a Canadian company. The primary purpose of the project is export, not import. A trickle of gas and jobs for Southern Oregon does not constitute public need or benefit, meanwhile the overall public cost is enormous, catastrophic even. The money to local governments like Coos Bay is a pay off for becoming an unnecessary industrial sacrifice zone. There are better jobs in renewables, with fewer harmful impacts.

The potential harm to impacted ecosystems this pipeline would cause is unacceptable.  
We are living amidst the sixth greatest extinction but our policies remain in a past that believes species should just move over for "commerce." Policies which consider the struggle and death of other species of lesser consequence. Meanwhile,  
"[a] staggering 41% of all amphibians on the planet now face extinction while 26% of mammal species and 13% of birds are similarly threatened."  
<http://www.theguardian.com/environment/2014/dec/14/earth-faces-sixth-great-extinction-with-41-of-amphibians-set-to-go-the-way-of-the-dodo>  
We are doing something wrong and must reassess.

Habitat in Oregon streams and rivers and other water bodies would be too heavily impacted.  
Millions are already being paid out to mitigate high water temperatures in important habitat for endangered and stressed fish and other species in Oregon's river and streams. It makes no sense to reverse what takes an enormous amount of time and energy to repair. Especially not for a dirty energy project that primarily benefits a foreign company. According to the DEIS the Pacific Connector pipeline and Jordan Cove export facility would cross rivers, streams and water bodies in Southern Oregon almost 400 times and the impacts are manageable But access to the large 3 foot in diameter fracked gas pipeline would require an almost 100 foot clearcut along the pipeline for approx 256 miles through Oregon and across many rivers and streams. Water that is not shaded with vegetation becomes heated. Heated water causes fish to be stressed and possibly die. When one species is wiped out in a web, the entire rest of the web is stressed.

I work with Friends of Wagner Creek in Talent, Oregon and together we are planning to restore the local Wagner Creek tributary of Bear Creek. From this work I have learned a creek must stay at approx. 64 degrees temperature for fish to survive, and consequently, the entire ecosystem. If temperatures are too warm the water running through the creek does not

IND310-1

IND310-2

IND310-3

## IND310 Johanna Harman, Talent, OR

- IND310-1 The Commission would make its decision whether or not to authorize the Project in its Order.
- IND310-2 The EIS does not make any determinations about public interest. See responses to IND1-6, IND10-1, and IND52-2.
- IND310-3 The EIS addresses impacts on waterbodies in section 4.4.

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support life as it has evolved, the creatures die and the creek and river becomes something different. The web of life here in Southern Oregon is more delicate and in need of support than than what your DEIS acknowledges. It will take a lot of time, energy and grants to restore the Wagner Creek to ensure the survival of the life it supports. Where there are bare areas lacking vegetation/clear cuts we must plant native plant species to cool the water. It will take many years to ensure this vegetation takes root and thrives; many years to ensure the repair this Creek. Your report says river and stream water temperatures would not be significantly impacted by pipeline access clear cuts, but logic stemming from my experience with Wagner Creek, plus the knowledge we are amidst the sixth greatest extinction says Southern Oregon's rivers and streams can't afford to host the Canadian company's project.

IND310-4

The proposed fracked gas pipeline would be a 95 foot gash across Southern Oregon interrupting a variety of ecosystems. It means habitat fragmentation. At what point does the habitat fragmentation result in collapse? Death by a 1000 cuts is what this project proposes for Southern Oregon, amidst the sixth greatest extinction. Because we are in a crisis we must reassess our thinking about what is acceptable and what is truly mitigable.

You must see outside the purpose of your particular organization. Supporting gas commerce might be the purpose of your organization and the 1937 Gas Act, but it's not the most important value we now collectively hold. It's not the future. Our collective survival and that which sustains us is more important than the temporary profits of the natural gas industry. Abandon dirty energy projects, embrace the transition to green energy. Stop the project, reassess FERC's role.

IND310-5

Sincerely,

Johanna Harman

**IND310 Continued, page 2 of 2**

- IND310-4 The proposed Pacific Connector pipeline route does not cross Wagner Creek. On stream temperatures, see response to IND2-9.
- IND310-5 Habitat fragmentation is addressed in section 4.6.1.2. See response to IND6-1. United States energy policy is developed by the President and Congress.

20150211-0020 FERC PDF (Unofficial) 02/11/2015

IND311

ORIGINAL

Connie J. Harris  
1421 Grays Creek Rd.  
Grants Pass, OR 97527

February 1, 2015

FILED  
SECRETARY OF THE  
FEDERAL ENERGY  
COMMISSION  
2015 FEB 11 AM 11  
FEDERAL ENERGY  
COMMISSION

Kimberly Bose, Secretary  
FERC  
888 First St. NE, Room 1A  
Washington DC 20426

RE: Docket Numbers CP 13-483 and CP 13-492; I am strongly OPPOSED to the Jordan Cove Pipeline.

Dear Kimberly,

The Canadian corporation, Veresen, is asking for the power of eminent domain to condemn and take the property they want to use for their Jordan Cove Liquefied Natural Gas (LNG) Project and for the profits they anticipate from exporting natural gas to Asia. About 90% of the approximately 300 landowners who would be affected have refused access to the company, thereby making the widespread use of eminent domain likely. Use of eminent domain requires service to the public good, and a for-profit pipeline built for resource export would seriously violate that requirement.

IND311-1

The terminal itself, with its highly flammable LNG storage tanks, is being called completely safe by Veresen, even though it would be built in an earthquake/tsunami zone. Scientists are raising alarm about dangers to the coastal ecosystem given the risks of catastrophic events; dredging and pollution of the fragile estuary for terminal development would create permanent damage to sea life and the coast environment.

IND311-2

IND311-3

These are only a few of the many very serious concerns I and many of my friends, whose property would be directly affected, have about this project. Please do not allow this LNG project to ever come to fruition.

IND311-4

Thanks very much for your time and consideration.

Sincerely,

*Connie J. Harris*

Connie J. Harris

**IND311 Connie J. Harris, Grants Pass, OR**

- IND311-1 See responses to IND38-1, IND307-5 and IND1-6.
- IND311-2 Safety is addressed in section 4.13.
- IND311-3 See response to IND309-8.
- IND311-4 See response to IND310-1.

20150211-0021 FERC PDF (Unofficial) 02/11/2015

IND312

Kimberly Bose, Secretary  
Federal Energy Regulatory Commission  
888 First St. NE, Rm. 1A  
Washington D.C. 20426

FILED  
SECRETARY OF THE  
COMMISSION  
2015 FEB 11 AM 11:17  
FEDERAL ENERGY  
REGULATORY COMMISSION  
ORIGINAL

RE: Docket No. CP13-483 and CP13-492

Dear Secretary Bose,  
I am in opposition to the proposed Jordan Cove LNG Project. Our coast line, is in a tsunami and earthquake danger zone. This pipeline would greatly threaten the environment, and the residents of the Oregon Coast. *Is this perhaps why California and Washington states have already turned down the LNG Project?* Fracking is an unconscionable practice, and anything that increases the use of this form of mining contributes to the destruction of America the Beautiful.

IND312-1

Further, I cannot condone allowing Canada the right to Eminent Domain in the United States. This policy seems to allow citizens' homes and public lands to be sold to the highest bidder; the far-reaching implications of such a practice are worth serious consideration.

IND312-2

We need to be coming up with viable, long range plans for energy usage, not putting our fingers in the failing dyke.

IND312-3

I am asking you, as one of our political leaders, to please use wisdom and prudence instead of giving in to the pressures of greed and short-sightedness. Please do not approve this proposal!

Thank you.

Sincerely,

Hayward Webster  
1501 Grays Creek Rd.  
Grants Pass, OR 97527

## IND312 Hayward Webster, Grants Pass, OR

- IND312-1 Potential impacts from a future predicted earthquake and tsunami on the terminal are discussed in section 4.2.1 of the EIS. The Pacific Connector pipeline would not threaten the environment and residents of the Oregon Coast. Safety is addressed in section 4.13. The states of California and Washington have not turned down LNG projects; because only the FERC has the authority to site onshore LNG terminals. See response to IND6-1 on fracking, which is not regulated by the FERC.
- IND312-2 See the response to IND307-5.
- IND312-3 United State energy policy is developed by the President and Congress.



20150211-0023 FERC PDF (Unofficial) 02/11/2015

IND313

Jan, 22, 2015

The Democratic Party  
Of Douglas County, Oregon  
P. O. Box 931  
Roseburg, OR 97470  
Ms. Lorna Hayden, Chair

Ms. Kimberly Bose,  
Secretary FERC,  
888 First St. NE, Rm1A  
Washington DC 20426

Dear Ms. Bose;

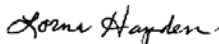
Please accept this letter of comment on Docket Numbers CP13-482 and CP13-483, also known as the Jordan Cove LNG Terminal and Pacific Connector Pipeline. We, the citizens of Douglas County registered with the Democratic Party have wrestled with this proposal for 10 years now. We respectfully request an additional 180 days to study and comment on this DEIS.

On December 10, 2014 at Canyonville Oregon your representative holding public hearing on these docket issues. Mr. Paul Friedman, stated the reason the DEIS was 5000 pages was because is "actually three DEISs rolled into one." In studying this very dense and lengthy DEIS we are at the same time being buried in Oregon DEQ, Army Corps of Engineers comment deadline well. In addition we also have EPA hearing on a local super fund site, the Formosa Mine.

As the issues emerge there is real evidence the EIS is inadequate its study of the impacts of the subduction earthquake that will occur just off shore of Coos Bay. The statements in the Oregonian Newspaper (January 16, 2015) of Dr. Jerry Havens of the University of Arkansas and Dr. James Vanary raise significant and disturbing questions about the modeling used in this DEIS. The terminal itself is being constructed in the direct path of the subduction earthquake off of the Oregon Coast.

This is a life and death matter to us locally but is also a potential calamity at great expense to the American taxpayer so a little more time for carefully study seems reasonable. In light of these long term impacts we respectfully submit the time limit for comment now to close Feb 13, 2015 be extended. If this is indeed three separate DEISes we deserve 90 days to study each one. Therefore We respectfully request an additional 180 days to study and comment on this DEIS.

Sincerely yours,



Ms. Lorna Hayden, Chair  
Douglas County Democratic Party

cc. President Barack Obama  
Sen. Ron Wyden  
Sen. Jeff Merkley  
Governor John Kitzhaber  
Rep. Peter DeFazio

**IND313 Lorna Hayden, Roseburg, OR**

- IND313-1 See the response to IND6-2. We address the comments of Dr. Havens in section 4.13.
- IND313-2 The Project is privately funded, and would be at no expense to the American taxpayer. The FERC decided not to extend the 90-day period for comments on the DEIS past February 13, 2015.

IND313-1

IND313-2

20150212-5185 FERC PDF (Unofficial) 2/12/2015 4:54:08 PM

IND314

Kyle Ward, Days Creek, OR.

As a resident of Days Creek, and as a first responder I am concerned about the Pipeline being located in Days Creek. First, in the EIS (Environmental Impact Statement) there is a proposal to install 6 dry hydrants in the Days Creek Fire District, I would like for the local fire official(s) to have some input as to their location. Secondly, Days Creek Rural Fire District has no static water supply for firefighting, I would like to see one or more "Cisterns" installed and maintained so that any departments assisting in fire suppression, and or HAZMAT efforts would have an adequate water supply in close proximity, other than a "Tender Shuttle". Third, I believe the local fire department(s) should be outfitted with "4 gas meters" that would detect particulates of natural gas, or oxygen depleted environments for each piece of apparatus. Fourth, The local Fire Departments should be outfitted with a thermal imaging camera, to assist with detecting potential leaks in the pipeline, as well as plumes, in order to establish a containment area. Fifth, I would like to ensure that the local first responders are given training on pipeline emergencies, as well as refresher training annually, at times and dates that are convenient to the department. Sixth, I would like to see designated landing zones for air ambulance, cleared and available during the construction of the pipeline. Seventh, I believe there should be an adequate water supply established, and familiar to all Emergency response personnel prior to construction in the Days Creek Rural Fire District. Eighth, I would like assurances that "Days Creek" and its tributaries will not be obstructed during the construction of the pipeline, many of us use this water for our households, as well as fire suppression. Ninth, I would prefer that the pipeline in this class 2 area be of the same size (Schedule) as the class 1 designation. Tenth, I would like for 100% of the welds in the Days Creek area to be inspected, not 10% as per federal safety standards. Eleventh, I would prefer the 3 foot minimum ground cover throughout the length of the route in the rural areas, (a portion of the pipeline will be exposed in the Milo Rural Fire District). Twelfth, I would like to see the local rural departments compensated for the added "Target Hazard" in their district, to cover, but not limited to; additional training, personnel, staffing for designated shifts, apparatus and personal protective equipment. Last of all, I would like to have a representative available for the south county Fire Chiefs meeting, to come out and address the board as a whole, and maintain an open door policy, to mitigate any concerns with Pacific Connector pipeline, the contractors, personnel, public safety, etcetera.

IND314-1

IND314-2

IND314-3

IND314-4

IND314-5

IND314-6

IND314-7

IND314-8

## IND314 Kyle Ward, Days Creek, OR

IND314-1 See response to IND2-3.

IND314-2 See response to IND2-3.

IND314-3 See response to IND2-3.

IND314-4 The pipeline would be installed beneath waterbodies and is not likely to obstruct them. As stated in section 4.4.2.2, there are points of diversion for surface water use within 150 feet of the construction work area for various uses including domestic uses and fire suppression. Pacific Connector would consult with the landowner if the point of diversion could not be avoided and identify an alternate location for the diversion prior to construction. Should it be determined that there has been an impact on the water supply, Pacific Connector would work with the landowner to ensure a temporary supply of water, and if determined necessary, Pacific Connector would replace the affected water supply with a permanent water supply. Mitigation measures would be specific to each property, and would be determined during landowner negotiations.

IND314-5 As stated in Section 4.13 of the DEIS, the FERC does not establish safety standards for pipelines; those standards are established by the DOT. It is outside the authority of the FERC to revise or alter the DOT safety standards. The DOT sets class locations for pipelines.

IND314-6 As stated in section 2.4.2.1, Pacific Connector intends to exceed DOT requirements where possible, and bury its pipeline up to 36 inches deep in Class 1 areas with normal soils and 24 inches deep in Class 1 areas with consolidated rock.

IND314-7 See response to IND2-3.

IND314-8 See response to IND2-3.